



Annual Report 2018

Organ Donation New Zealand
New Zealand's official donor agency

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ORGAN DONATION NEW ZEALAND

About Organ Donation New Zealand

Organ Donation New Zealand (ODNZ) is the national service for deceased organ and tissue donation. It is currently managed through the Auckland District Health Board and has offices at the Greenlane Clinical Centre in Auckland.

ODNZ co-ordinates all organ and some tissue donation from deceased donors in New Zealand and the donor co-ordinators provide information and ongoing support for those families who have generously agreed to organ and tissue donation.

ODNZ works with health professionals in donor hospitals to ensure that processes for deceased donation are nationally consistent and of the highest medical, ethical and legal standards.

The Guiding Principles of ODNZ are:

1. Every opportunity for deceased organ donation should be recognised by Intensive Care Unit (ICU) staff and every family should have donation discussed with them by a health care professional with compassion, respect and appropriate knowledge and skill. Donation should be discussed with all families irrespective of whether the word 'donor' is on the driver licence.
2. The process of organ donation must accord with good medical practice, ethical standards, and the law. The Human Tissue Act (2008) requires consent before organs or tissues may be removed from a deceased person for transplantation.
3. The family's decision about donation should always be respected. All donors come out of human tragedy and donation by the family is voluntary.

ODNZ provides education for health professionals, information to the media and responds to public enquiries.

This Report

This report outlines the activities of ODNZ and provides an authoritative account of organ donation and transplantation activity in New Zealand during 2018.

It is intended to be a valuable source of information for health professionals involved in organ and tissue donation and transplantation; and for the general community.

We gratefully acknowledge the following people for their assistance with information in this report:

Louise Moffatt from the New Zealand National Eye Bank; Jill Faulkner from the New Zealand Heart Valve Laboratory; Vladimir Slyshkov from the New Zealand Skin Bank; Helen Gibbs from the New Zealand Heart and Lung Transplant Service; Margaret Johnston from the New Zealand Liver Transplant Unit; Tricia Casey, Tony Stephens and Susie Rich from the Renal Transplant Services.

From the ODNZ Clinical Director

Organ Donation New Zealand (ODNZ) sincerely thanks all the families who agreed to organ and tissue donation in 2018.

It is important to acknowledge and remember that all donors come out of human tragedy and that organ and tissue donation would not be possible without the generosity of families at a very difficult time.

In the past year, there were 62 donors who donated organs following death, enabling 192 recipients to receive kidney, liver, lung, heart or pancreas transplants. Many more people received tissue transplants (corneas, sclerae, heart valves and skin) from these donors.

Of the 62 deceased donors, 54 were donors after brain death (DBD, where the brain is dead but the heart has not yet stopped) and eight were donors after circulatory death (DCD, after the heart has stopped). There is potential for further increase in the number of DCD donations.

The annual number of deceased organ donors in New Zealand is similar for 2016, 2017 and 2018, having increased substantially since 2013. This increase in the number of donors is associated with a large increase in the recognition of opportunities for organ donation, an increase in discussions with families and an increase in consultations with ODNZ donor coordinators and medical specialists.

In addition to these 62 organ donors, ODNZ facilitated 74 tissue-only donations from people who died in a hospital, hospice or at home.

In 2018 ODNZ continued to focus on education, facilitating hospital study days throughout NZ, an induction day and training for Donation Link nurses, a Core Donor Family Conversation Workshop (cFDC) and ICU Donation Audit Meetings. In addition to these, ODNZ organised an education session for Maori health professionals in Hawke's Bay to provide information and encourage discussion about organ and tissue donation.

I would like to thank my colleagues at ODNZ, the Donation Link teams, ICU nurses and doctors, operating theatre (OT) staff and other health professionals involved in organ and tissue donation, for their support and dedication to donation and enabling transplantation in New Zealand.

Staffing

Janice Langlands (team leader), Mary O'Donnell, Lauren Sprenger, Sue Garland, Annette Flanagan and Lisa Craig (who commenced in September 2018), are the ODNZ donor co-ordinators. They provide a 24-hour consultation, advice and support service to health professionals involved in organ donation and tissue donation.

Drs Stephen Streat (clinical director), James Judson and Emma Merry were the ODNZ medical specialists during 2018. Dr Merry resigned from ODNZ in November. The medical specialists provide a 24-hour support and advice service for the donor co-ordinators and health professionals on all aspects of the donation process.

Drs David Closey, Chris Poynter and Jo Ritchie assisted with medical specialist on-call in 2018. Dr Jo Ritchie will begin working as a part-time medical specialist with ODNZ in January 2019.

Rebecca Oliver, communications advisor, is responsible for providing information to health professionals, media and the public. Leeny Gin is the team administrator for ODNZ.

Donation Link Teams

The Donation Link teams in donor hospitals consist of ICU Donation Link nurses and doctors and OT Donation Link nurses. They are the local experts and liaison for organ and tissue donation for their hospital.

Since January 2018 the Ministry of Health has funded (part-time) ICU medical and nursing staff in Donation Link roles. ODNZ is not responsible for these contracts which are between the Ministry and each District Health Board (DHB).

ODNZ ACTIVITIES

Donor Family Support

The donor co-ordinators provide information and support for donor families both before and after organ and tissue donation. This includes the offer of hand prints and locks of hair, providing general information about the outcome of their donation and facilitating anonymous communication between transplant recipients and donor families and vice versa.

Thanksgiving Services are held annually and respectfully acknowledge the generosity of families who have donated organs and tissues following the death of a family member. Families of donors, recipients and their families, and health professionals involved in both organ donation and transplantation are invited to these services. Services were held in May 2018 with around 500 attendees at the Holy Trinity Cathedral in Auckland and around 300 people at the Transitional Cathedral in Christchurch.

Education

Core Family Donor Conversation Workshop (cFDC)

A cFDC Workshop was held in Auckland on the 6 and 7 September 2018 for health professionals working in organ donation. The workshop aims to increase the knowledge and skills of health professionals having conversations with families of potential donors. The workshop was facilitated by Australians Dr Steve Philpott and Bernie Dwyer and was attended by 11 ICU nurses and 21 ICU doctors. Drs James Judson and Jo Ritchie and Janice Langlands attended as representatives of ODNZ.

Once again the workshop was successful, with very positive feedback. ODNZ plans to hold another cFDC workshop in September 2019 and strongly recommends attendance to all ICU specialists and trainees, Donation Link nurses and other health professionals involved in organ and tissue donation.

Donation Link Nurse Education

Donation Link Workshop

The ICU and OT Donation Link nurses attended a two-day workshop in Auckland on the 1 and 2 November 2018.

On the first day of the workshop, the OT Donation Link nurses visited the transplant services and tissue banks in small groups and then shared feedback from their visits with the larger group. Meanwhile the ICU Donation Link nurses attended the ICU Donation Audit meeting along with their medical colleagues.

The second day of the workshop included a number of topics relating to organ and tissue donation: ODNZ's communication activities in 2018, lung transplantation, cultural safety and an overview of international donation activities including donor rates, donor registries, legislation and consent frameworks.

Donation Link Nurse Induction Day

An education day was held in Auckland in May for nine Donation Link nurses new to their roles. The programme included an introduction to the ODNZ team, an overview of the process of organ and tissue donation, brain death, ICU processes and support for the family.

The ICU Donation Link nurses had a practical session on data entry for the ICU Donation Audit and a session on physiological support of the potential donor in the ICU. The OT Donation Link nurses participated in a simulation of the OT set-up and the procedures for organ retrieval following brain death.

Expanded Donation Link Nurse Study day

A study day for the Expanded Donation Link nurses was held in June prior to the ICU Donation Audit meeting. This day included an update on the changes to the ICU Donation Audit, an outline of the proposed Advanced Study Day for ICU nursing staff and feedback from the Donation Link nurses on their activities.

ICU Donation Audit

Donation Audit Meetings were held in Auckland in June and November and were attended by ICU Donation Link nurses and doctors. ODNZ is grateful to the ICU Donation Link nurses who continue to collect and enter data for this audit.

Dr James Judson and a donor coordinator visited Middlemore, Rotorua and Wellington ICUs to provide education and feedback on each unit's data.

Māori Health Education

Middlemore Hospital's ICU staff and Te Kaahui Ora Maori Health team were invited to attend a Poukai on Paaraawera Marae in Te Awamutu in March. Janice Langlands, donor co-ordinator, was invited to attend along with the Middlemore Team. Dr Robert Bevan, intensivist, spoke about deceased organ donation by sharing three personal stories about organ and tissue donation and transplantation.

A Hui was held at Mihiroa Marae, Hawke's Bay Hospital in September 2018. The Hui was attended by staff from Hawke's Bay Hospital's Maori health, renal service and ICU. Donor Coordinator Sue Garland and Dr Stephen Streat from ODNZ also attended. The Hui included an overview of organ and tissue donation by Dr Stephen Streat, personal stories from donor whānau Wikitoria Smith and kidney recipient Charie Tipiwai, and finished with a discussion by attendees.

Study Days and Health Professional Education

In 2018 education for health professionals (full days, half days or educational sessions) was held in the following hospitals.

Auckland City (1)	Wellington (1)
Middlemore (1)	Christchurch (2)
Tauranga (1)	Dunedin (1)
Rotorua (1)	Southland (1)
Hawke's Bay (1)	

This education provided nursing staff from ICUs and OTs, and other health professionals involved in donation and transplantation, with information about the organ and tissue donation process.

Advanced Study Days for experienced ICU nursing staff were facilitated by Dr Emma Merry and Janice Langlands in Middlemore and Hawke's Bay Hospitals. These study days focused on the communication with families of potential

organ and tissue donors, completion of the required documentation for donation and facilitation of the donation process.

Other education sessions were provided by the donor co-ordinators for health professionals in the following hospitals and departments:

- Whangarei OT
- Waikato OT
- North Shore OT
- Starship PICU and OR
- Hutt OT
- Wairau ICU and OT

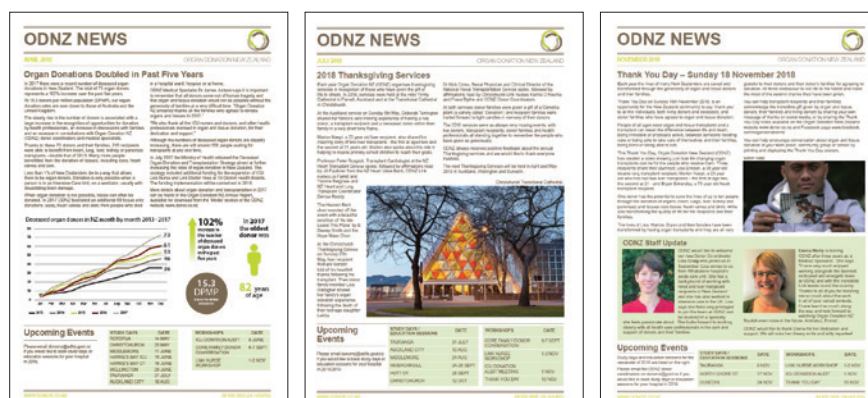
The donor co-ordinators also provided short educational sessions for health professionals in hospital wards and departments, hospices and for nursing students and postgraduate nurses at educational institutes and universities.

Feedback from the participants at these study days and educational sessions was very positive.

Communication

ODNZ Newsletters

A hard copy newsletter providing news and information for health professionals in donor hospitals was produced by ODNZ in April, July and November 2018. These newsletters featured information about organ and tissue donation and transplantation, along with stories from transplant recipients and donor families.



ODNZ Link Nurse Communication

The Donation Link nurses also received a monthly e-newsletter with ODNZ news, education dates, organ donation and transplantation news and links to new extranet content.

Public Awareness

In 2018 ODNZ facilitated a wide variety of print, television, radio and online media coverage aimed at educating people about the life-changing nature of organ

and tissue transplants and encouraging people to have a conversation about donation with their families.

The ODNZ team responded to over 200 public enquiries via the 24-hour 0800 telephone number (0800 4DONOR), as well as email and website enquiries.

The ODNZ public website www.donor.co.nz features stories from donor families, recipients and health professionals, while the 'Have the Conversation Today' page provides a step by step guide for people to think about and discuss organ and tissue donation with their family, whānau or close friends.

The number of people accessing the website increased in 2018 to 18,727 unique visitors and over 63,000 page views.

Pamphlets and posters were also distributed by recipients to libraries, schools, doctor's surgeries, Citizen Advice Bureaus and at community events.

Thank You Day 2018

Held on Sunday 18 November 2018, Thank You Day encouraged the New Zealand community to join together with transplant recipients and health professionals in showing appreciation for organ and tissue donors and their families.

ODNZ created a video for Thank You Day showing just how life changing organ transplants can be for the people who receive them. Three recipients kindly shared their journeys; Lisa Erikson, a double-lung transplant recipient, Marlon Naepi, a liver transplant recipient and Bryan Eckersley, a heart transplant recipient.

The lives of Lisa, Marlon and Bryan have been transformed by their transplants and they are all very grateful to their donors and their donor families. All three recipients endeavour to live life to the full and make the most of the second chance they have been given. We thank them very much for sharing their experiences.

The video received over 17,000 views in the week following Thank You Day and was shared widely on social media by District Health Boards, health professionals and the public. The video was also shown on screens in public waiting areas at Auckland, Tauranga, Rotorua, Taranaki, Christchurch and Dunedin hospitals.



Conferences and Meetings

ODNZ is committed to maintaining the highest medical, ethical and legal standards in organ donation.

In order to stay up to date with current research and best practice, ODNZ staff attended the following regional, national and international conferences and meetings in 2018.

Australia and New Zealand Intensive Care Society Regional Meeting, Wellington, 4-6 April

Drs Emma Merry and James Judson. Emma presented a paper, "Deceased Organ Donation in New Zealand: Rewards Come from Hard Work".

Transplant Society of Australia and New Zealand Melbourne, 28 April-1 May

Janice Langlands

Public Relations Institute of New Zealand (PRINZ) National Conference Hamilton, 25 May

Rebecca Oliver

Australasian Transplant Coordinators Association Conference Melbourne, 15 June

Lauren Sprenger and Annette Flanagan

The Transplantation Society Conference Madrid, 2-6 July

Dr James Judson and Sue Garland

Bioethics, Medical Ethics and Health Law Jerusalem, 27-29 November

Dr James Judson

Australian and New Zealand Donor Surgeons, Donor Coordinators Advisory Committee Meeting, Sydney, 5 December

Lauren Sprenger

ORGAN AND TISSUE DONATION

Table 1:
Number of deceased organ donors in New Zealand

In 2018, 62 deceased organ donors from ICUs in 15 donor hospitals donated organs (and tissues) for transplantation. Of these, 54 donated following brain death (DBD) and 8 donated following circulatory death (DCD).

This does not include tissue-only donors (eyes, heart valves and skin).

Hospital	2014	2015	2016	2017	2018
Auckland City CVICU	0	0	0	0	0
Auckland City DCCM	6[1]	6[1]	7[2]	21[5]	11[1]
Christchurch	7	8	11[1]	11[1]	12 [1]
Dunedin	4	5	11[1]	7[1]	4
Gisborne	1	1	0	0	0
Grey Base	0	0	0	0	1
Hawke's Bay	3	2	3	2	2
Hutt	0	0	0	0	0
Middlemore	3[1]	3[2]	2[1]	4[3]	6[3]
Nelson	0	2	3	1	3
North Shore	1	1	0	3	2
Palmerston North	2	0	0	0	2
Rotorua	1	0	0	1	1
Southland	1	3	1	3	1
Starship Children's	1	0	0	0	0
Taranaki Base	0	1	0	1	0
Tauranga	0	0	3	0	0
Timaru	0	0	0	0	2
Waikato	3[1]	8[1]	6[1]	9[2]	5[2]
Wairau	0	0	0	0	0
Whanganui	1	0	2	1	0
Wellington	10[3]	12[1]	11	6	9[1]
Whakatane	1	0	0	1	0
Whangarei	1	1	1	2	1
Total number of donors	46[6]	53[5]	61[6]	73[12]	62[8]

Note: [] DCD donors

Table 2:
Cause of Donor
Death by Year

	2014	2015	2016	2017	2018
Intracranial haemorrhage	15	24	30	38	24
Cerebral infarct	5	2	6	6	3
Trauma (road)	7	5	6	6	11
Trauma (other)	10	6	2	4	11
Hypoxia-anoxia	8	15	15	16	9
Other	1	1	2	3	4
Total	46	53	61	73	62

Table 3:
Age of Deceased
Donors By Year

	2014	2015	2016	2017	2018
Mean	49.7	44.8	48.1	48.8	46.9
Median	45.6	47.0	52.7	51.6	49.0
Minimum	0.2	5.0	17.7	14.3	14.5
Maximum	82.5	79.0	80.0	82.6	81.2

Table 4:
Ethnicity of Deceased
Donors by Year

	2013	2014	2015	2016	2017	2018
European	29	37	46	47	58	46
Māori	3	4	5	5	7	7
Pacific People	0	2	0	1	4	4
Other	4	3	2	8	4	5
Total	6	46	53	61	73	62

Table 5:
Organs and Tissues Retrieved from Deceased Donors and Transplanted

	2013	2014	2015	2016	2017	2018
Kidneys	61	67	73	95	121	99
Hearts	9	17	12	11	23	19
Lungs (27 pairs, 1 single)	19	20	25	20	23	28
Livers	24	32	41	51	48	44
Pancreas	1	2	3	4	4	6
Eye tissue	17	23	26	28	37	26
Heart valve tissue	14	8	17	20	20	7
Skin	3	3	3	2	2	0

Table 6:
Organs from New Zealand Deceased Donors Transplanted in Australia

In 2018 some organs from New Zealand donors were transplanted to Australian recipients and vice versa in accordance with the Transplantation Society of Australia and New Zealand (TSANZ) Clinical Guidelines for Organ Transplantation from Deceased Donors, Version 1.2 – December 2018, which is available via their website: www.tsanz.com.au

	2014	2015	2016	2017	2018
Liver	4[3]	5[3]	7[1]	1	6[1]
Heart	1	1	0	0	0
Lungs	3	2	3	3	0
Kidney	0	0	0	0	0

[] Split livers

Table 7:
Organs from Australian Deceased Donors Transplanted in New Zealand

	2014	2015	2016	2017	2018
Liver	7	4[1]	8	2[1]	3
Heart	1	1	0	1	1
Lungs	0	0	0	0	0
Kidney	0	0	0	0	0

[] Split livers

Table 8:
Summary Data from
ICU Donation Audit
Database

	2017	2018
All deaths in ICU	1308	1329
Deaths ventilated in ICU with severe brain damage	494	480
Possibly brain dead ¹	195	201
Possibly brain dead ¹ and organ donation formally discussed with family by health professionals	131	132
Possibly brain dead ¹ and organ donation formally discussed with family by health professionals and family agreed to donation	67	63
Possibly brain dead ¹ and tested	113	100
Possibly brain dead ¹ and tested and determined to be brain dead	109	99
Potential donation after withdrawal of therapy (WOT) ²	230	228
WOT ² in a DCD accredited hospital ³	173	169
WOT ² in a DCD accredited hospital formally discussed with family by health professionals ³	36	37
WOT ² in a DCD accredited hospital formally discussed with family by health professionals and family agreed to donation ³	15	14

1. Possibly brain dead: Fixed dilated pupils and no apparent brain reflexes just prior to death.
2. Possible donation after Withdrawal of Therapy (WOT): Aged 70 or less and had treatment withdrawn and died in ICU 90 minutes later or less.
3. DCD accredited hospitals: Auckland City (DCCM), Starship Children's, Middlemore, Waikato, Hawke's Bay, Wellington, Nelson, Christchurch, Dunedin.

Table 9:
Summary Data
from ODNZ Referral
Database

Data from ODNZ records	2014	2015	2016	2017	2018
Telephone discussions about potential organ donation	128	136	168	271	230
Brain dead donors	40	48	55	61	54
DCD donors	6	5	6	12	8
Total donors	46	53	61	73	62

The number of referrals to ODNZ includes some who do not appear in the ICU Donation Audit because, for example, they might have died without ever having been admitted to ICU, or might not have died in ICU.

ORGAN TRANSPLANTATION IN NEW ZEALAND

Organ transplantation in New Zealand includes:

- Kidney transplantation (deceased-donor and live-donor) at Auckland City, Starship Children's, Wellington and Christchurch Hospitals.
- Liver transplantation (deceased-donor and live-donor) at Auckland City and Starship Children's Hospitals.
- Heart transplantation at Auckland City and Starship Children's Hospitals
- Lung transplantation at Auckland City and Starship Children's Hospitals
- Pancreas transplantation at Auckland City Hospital.

Data in Tables 10-14 include all transplants performed in New Zealand (including organs from Australian deceased donors). See Tables 6 and 7 for details of Trans-Tasman organ sharing.

Table 10:
Kidney Transplantation
by Year and Donor Type

	2014	2015	2016	2017	2018
Recipients, deceased-donor, single kidney	65	73	85	115	97
Recipients, deceased-donor, double kidney	1	0	5	3	1
Live-donor	72	74	82	69	84
Total	113	138	149	172	182

Table 11:
Heart and Lung
Transplantation by Year

	2014	2015	2016	2017	2018
Heart	17	12	11	24	20
Lung	17	23	17	20	28

Table 12:
Liver Transplantation
by Year and Donor
Type

	2014	2015	2016	2017	2018
Adult, deceased donor	31	36	46	45	41
Adult, live adult donor	0	0	2 [1]	1	0
Child, deceased donor	7	9	10	7	6
Child, live adult donor	5	3	1	2	2
Total	43	48	59	55	49

Note: [1] Domino transplant

Table 13:
Pancreas
Transplantation
by Year

	2014	2015	2016	2017	2018
Pancreas	2	3	4	4	6

Table 14:
Multiple Organ
Transplants by Year

This table does not include the number of recipients of two kidneys.

	2014	2015	2016	2017	2018
Kidney and pancreas	2	2	4	4	6
Liver and kidney	2	2	1	1	0
Liver and pancreas	0	1	0	0	0
Heart and liver	1	0	1	0	1
Heart and kidney	0	0	1	0	0
Lung and liver	0	0	1	0	2
Total number of multiple transplants	5	5	8	5	9

TISSUE-ONLY DONATION

Table 15:
Deceased Tissue-Only
Donation facilitated
by ODNZ

In 2018 there were 74 deceased tissue-only donors facilitated by ODNZ. Two of the tissue-only donors were *intended organ donors* where organ donation did not proceed and tissue-only donation was facilitated. Tissue donation can include skin, eye and heart valve tissue.

Referred from:	Ward/Unit	Tissue (only) Donors
Auckland City Hospital	CVICU	6
	DCCM	21
	Wards 61, 63(2), 73, 81, Merino	6
	ED	1
	Mortuary	1
Christchurch Hospital	ICU	15
Dunedin Hospital	ICU	1
Nelson Hospital	ICU	1
North Shore Hospital	ICU	1
Starship Children's Hospital	Cardiology	1
Tauranga Hospital	ICU	1
Waikato Hospital	ICU	4
Wellington Hospital	ICU	3
	Ward 5 South	1
Whakatane Hospital	ICU	1
Whanganui Hospital	ICU	1
Whangarei Hospital	ICU	1
Mercy Hospice, Auckland		3
Mary Potter Hospice (2), North Haven Hospice		3
Family		2

Table 16:
**Total Deceased
 Tissue Donation
 in New Zealand**

Number of Donors	2014	2015	2016	2017	2018
Skin	13	8	10	5 [1]	3*
Heart Valves	34	30	32	34	24
Eyes	174	172	144	188	145

[1] Living donor

* Skin retrieval not possible from January-July 2018

The corneal co-ordinators from the New Zealand National Eye Bank also facilitate eye-only donation referred directly to their service as well as from the Bereavement Team at Middlemore Hospital.

The heart transplant team also co-ordinate heart valve donation from some explanted hearts from heart transplant recipients.

www.donor.co.nz

