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<b>Introduction</b>	Introduction from Dr Stephen Streat and Janice Langlands	02
<b>Organ Donation New Zealand</b>	Staffing / Advisory Committee / Co-ordination of Organ and Tissue Donation / Donor Family Support / Education / Public Awareness / Attendance at Conferences and Training Workshops	03-07
<b>Organ and Tissue Donation</b>	Tables: Number of Deceased Organ Donors in New Zealand / Cause of Donor Death by Year / Age of Deceased Donors by Year / Ethnicity of Deceased Donors by Year / Organs and Tissues Retrieved from Deceased Donors and Transplanted / Organs from New Zealand Deceased Donors and Transplanted in Australia / Organs from Australian Deceased Donors Transplanted in New Zealand	08-10
<b>Organ Transplantation in New Zealand</b>	Kidney Transplantation / Heart and Lung Transplantation / Liver Transplantation / Pancreas Transplantation	11-12
<b>Tissue Donation and Transplantation</b>	Tissue-only Donation Facilitated by ODNZ / Total Tissue Donation for Transplantation by Year	13

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## INTRODUCTION

It is the families who generously agree to organ and tissue donation that make transplantation possible. Organ Donation New Zealand (ODNZ) would sincerely like to thank these families on behalf of the recipients and their families who have benefitted from the transplantation of organs and tissues.

ODNZ would also like to thank the Link Team members and the other health professionals at donor hospitals for their commitment and support of organ and tissue donation.

The donor co-ordinators at ODNZ have worked with nursing and medical staff to recognise the potential for tissue donation and offer the option of donation to families at hospitals, hospices and aged care facilities. We are grateful to these health professionals for their ongoing support.

For their input into this report we also gratefully acknowledge Kylie Hurst and Lee Excell from the Australia and New Zealand Organ Donation Registry; Rosalie Gow from the Department of Forensic Pathology, Auckland City Hospital; Louise Moffatt and Helen Twohill from the New Zealand National Eye Bank; Jill Faulkner and Lorraine Craighead from the New Zealand Heart Valve Laboratory; and Vladimir Slyshkov from the New Zealand Tissue Bank at the New Zealand Blood Service.

We appreciate the support and encouragement we receive from the ODNZ Advisory Committee, our transplant and tissue bank colleagues, the Ministry of Health and the Australian and New Zealand Intensive Care Society.

Finally, our sincere thanks to our colleagues at ODNZ for their commitment and efforts in 2012. We are also grateful to Melanie Stevenson for the production of this report.



Stephen Streat FRACP  
Clinical Director, ODNZ



Janice Langlands  
Team Leader, ODNZ

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

ODNZ co-ordinates organ and tissue donation from deceased donors in New Zealand and the donor co-ordinators provide information and ongoing support for those families who have generously donated organs or tissues.

ODNZ continues to audit donation practises in New Zealand and works with health professionals in donor hospitals

to ensure there are nationally consistent processes for deceased donation.

The service provides education for health professionals, supplies information to the media and responds to public enquiries.

ODNZ was grateful to receive additional funding from the Ministry of Health.

## Staffing

Janice Langlands (team leader) and Mary O'Donnell are the donor co-ordinators for ODNZ. The recruitment of two new donor co-ordinators commenced in late 2012. The two medical specialists: Dr Stephen Streat (clinical director) and Dr James Judson have continued in their roles, as have Melanie Stevenson (nee Selby) as the communications advisor and Margaret Kent as the team administrator.

## Link Teams:

The Link Teams play a key role as local leaders, experts and liaison persons for organ and tissue donation in all donor hospitals in New Zealand. They consist of Intensive Care Unit (ICU) Link Nurse(s), Operating Theatre Link Nurse(s) and an ICU Link Doctor.

## Advisory Committee

The Advisory Committee comprises representatives from intensive care medicine and nursing, organ and tissue transplantation, representatives of

Maori health and Pacific health, and a consumer representative. The committee remained unchanged in 2012 and met with ODNZ in December.

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**Co-ordination of Organ and Tissue Donation**

The donor co-ordinators provide a 24-hour service for referrals from ICUs for organ donation, for tissue donation and for referrals of livers and cardiothoracic organs from Australia.

A medical specialist is available to provide advice and support for health professionals in the ICUs on all aspects of the donation process.

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**Donor Family Support**

The donor co-ordinators provide information and support for donor families both before and after organ and tissue donation. This can include:

- information about the donation process
- providing hand prints and locks of hair of their family member
- general information about the outcome of the donation
- anonymous communication from the recipients
- Thanksgiving Services.

The Thanksgiving Services 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.

A Service was held at the Holy Trinity Cathedral, Parnell, Auckland in 2012 with approximately 500 attendees. A Service was also held at Christ's College Cathedral in Christchurch and approximately 250 people attended this. The Christchurch Service was especially poignant as in the past the Services were held at the Cathedral.

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**Education**

**Study Days and Health Professional Education**

In 2012 study days were held in the hospitals identified on the right. These study days include all aspects of the donation process and are attended by nursing staff from ICUs and Operating Theatres (OT), and other health professionals involved in donation and transplantation.

Other education sessions were provided for health professionals throughout New Zealand including nursing students and postgraduate nurses.



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**Education cont...****Health Professional Education**

Teaching sessions on tissue donation were organised for nursing staff in ICUs and wards at Auckland City Hospital as well as hospices and aged care facilities.

**Australasian Donor Awareness Program Training (ADAPT)**

A Medical ADAPT workshop was held in Auckland in September 2012. The facilitators for this workshop were Mr Mal McKissock, bereavement counsellor, Sydney, Dr Stephen Streat and Dr James Judson. This one-day workshop for ICU doctors focused on communication with families.

**Link Workshop**

The Link Nurses attended a two-day workshop in Auckland in November 2012. The first day of the workshop covered the assessment of potential organ and tissue donors including infectious diseases, social risk factors and skin lesions.

ICU Link Doctors joined ICU Link Nurses on the second day to discuss the data from the ICU Death Audit. The day for OT Nurses focused on renal transplantation which included an overview, surgical aspects, paired kidney exchange and altruistic donation.

**ODNZ/ICU Death Audit**

ODNZ is grateful to the ICU Link Nurses who collect and enter data for this Audit. In 2012 Audit meetings were held in May and November (as part of the Link Workshop) and attended by Link Nurses and Link Doctors.

Dr James Judson continued to improve the Audit tool. Online filters were developed to identify data that needed discussion within the ICU team. Newsletters about the ICU Death Audit were distributed to the ICU Link Teams in January and June 2012.

Together with the donor co-ordinators, Dr Judson continued to visit hospitals throughout New Zealand to provide feedback on their own data. Hospitals visited were: Auckland, Middlemore, Waikato, Tauranga, Taranaki, Hutt, Wellington and Wairau. He also presented to the Auckland Paediatric Transplant Group as well as the Auckland and Christchurch Renal Groups.

**ODNZ News**

A quarterly newsletter produced by ODNZ and featuring information about organ donation and transplantation continues to be distributed throughout donor hospitals in New Zealand by the Link Nurses. Each newsletter also features a story from a donor family and a transplant recipient and introduces health professionals involved in organ and tissue donation.

**Bereavement Course**

In September 2012 bereavement counsellor Mal McKissock facilitated the three-day bereavement course that is organised annually by ODNZ. This was again attended by health professionals who provide support for bereaved families.

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## Public Awareness

## Thank You Day 2012

ODNZ, together with Kidney Health New Zealand, held a Thank You Day on World Kidney Day, 8 March 2012. This was an opportunity for recipients to thank their donors and donor families for the life-saving gift they have



received. T-shirts, cards and posters with "Thank You" written on them in different languages were printed and distributed to recipients who wished to be involved. Recipients wearing the brightly coloured t-shirts planted freesia bulbs in their local community to symbolise the new life they have been given. Local media were extremely supportive of the event and different stories featured in 25 newspapers throughout the country, from Kaitaia to Bluff. The freesia bulbs were generously donated by Oderings.

## School Education Program

In 2012 ODNZ continued to work with Wellington-based education development company Learning Media to develop an education program about organ donation and transplantation for use in schools throughout the country.

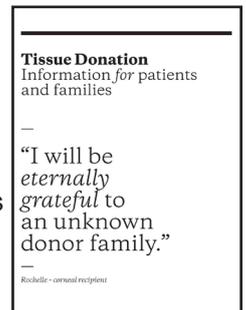
The development of a program for 14-15 year-old students will be released in 2013. The sponsorship provided by the Organ Donation Awareness Trust has been used for this program.

## Waikato Management School

Public relations students at the Waikato Management School focused on organ donation for their final assignment. The students set up four 'agencies' to research, plan, design and implement campaigns for ODNZ. The focus of the campaigns was to raise awareness of the need to talk to families about one's wishes regarding organ donation. The campaigns were wide-spread throughout Hamilton and ODNZ was impressed with the innovative ideas the students developed.

## Tissue donation pamphlet

A tissue donation pamphlet was produced to give to patients and/or their families. The pamphlet explains how tissue donation is possible in situations where organ donation is not.



## Public enquiries

ODNZ responds to public enquiries from the 24-hour 0800 number (0800 4DONOR) and from the website ([www.donor.co.nz](http://www.donor.co.nz)).

## Organ Donor Awareness Car Show

ODNZ began working with lung recipient Danny Saunders to organise a classic car show to raise awareness for organ and tissue donation and transplantation. The car show will be held in Tauranga on The Strand, Saturday 16 March 2013 from 9am-3pm.

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**Attendance at  
Conferences and  
Training Workshops**

**3rd International Society of Advance  
Care Planning and End of Life Care  
Conference 2012, Chicago,  
31 May-2 June**

James Judson attended this conference where there was discussion about tissue donation in Advance Care Plans.

**Intensive Bioethics Course 38,  
Washington, 4-8 June**

This is the second time James Judson has attended this annually run course. It provides an excellent basis for understanding the general principles of medical ethics.

**Bereavement Course, Auckland,  
10-12 September**

Mary O'Donnell attended this three-day course run for health professionals who provide support to bereaved families.

**Australian and New Zealand Intensive  
Care Society Annual Scientific  
Meeting, Adelaide, 25-27 October**

Stephen Streat was an invited speaker at this meeting and spoke about discussing organ donation with families.

**2012 European Organ Donation  
Congress, 24th ETCO-EDC,  
Dubrovnik, 5-7 October**

James Judson attended this conference which provided an interesting overview of how different countries are approaching issues around acquisition of organs for transplantation.

**Public Sector Network–The New Old,  
Wellington, 2 September**

Melanie Stevenson attended this conference which focused on new technologies and social media.

**Australian Organ and Tissue Donation  
and Transplantation Authority:  
National Electronic Donor Record  
Workshop, Melbourne, 29 October**

Australia is developing a web-based electronic referral system for organ and tissue donation. Janice Langlands attended this workshop as New Zealand also wishes to participate in this electronic referral system.

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## ORGAN AND TISSUE DONATION

In 2012, 38 deceased donors from ICUs in 13 donor hospitals donated organs (and tissues) for transplantation. This does not include those who donated tissues (eyes, heart valves and skin) only. All donors donated following brain death. There were no donors in 2012 who donated following cardiac death.

Table 1:

**Number of deceased organ donors in New Zealand**

HOSPITAL	2008	2009	2010	2011	2012
AUCKLAND CITY DCCM	8 [1] *	12	8	7	6
CHRISTCHURCH	4 [1]*	4	3 [1]*	5	7
DUNEDIN	3	7	4	4	3
GISBORNE	2	0	0	0	0
GREY BASE	0	1	1	0	0
HAWKE'S BAY	1	3	1	2	3
HUTT	0	0	1	0	1
MIDDLEMORE	1	1	2	3	4
NELSON	1	1	1	1	1
NORTH SHORE	0	1	0	1	1
PALMERSTON NORTH	1	0	0	1	2
ROTORUA	0	1	1	2	0
SOUTHLAND	0	0	2	0	1
STARSHIP CHILDREN'S	1	2	0	0	0
TARANAKI BASE	0	1	0	0	0
TAURANGA	0	0	0	0	0
TIMARU	1	1	0	1	2
WAIKATO	5	2 [1]*	11	5 [2]*	0
WAIRAU	0	1	0	0	0
WANGANUI	0	0	0	0	0
WELLINGTON	3	4 [1]*	5	4	6
WHANGAREI	0	1	1	2	1
<b>TOTAL NUMBER OF DONORS</b>	<b>31</b>	<b>43</b>	<b>41</b>	<b>38</b>	<b>38</b>

Note: [ ]\* DCD donors

Table 2:

**Cause of  
Donor Death  
by Year**

	2008	2009	2010	2011	2012
CVA	22	21	22	19	14
TRAUMA (ROAD)	2	9	9	6	4
TRAUMA (OTHER)	3	4	4	4	8
HYPOXIA-ANOXIA	4	8	2	8	7
OTHER	0	1	4	1	5
<b>TOTAL</b>	<b>41</b>	<b>43</b>	<b>41</b>	<b>38</b>	<b>38</b>

Table 3:

**Age of  
Deceased Donors  
By Year**

	2008	2009	2010	2011	2012
MEAN	42.7	43.0	43.5	40.0	47.2
MEDIAN	44	46	44	44	49.2
MINIMUM	12.0	3.6	15.1	13.0	14.9
MAXIMUM	67.6	74.6	71.4	73.9	76

Table 4:

**Ethnicity of  
Deceased Donors  
by Year**

	2008	2009	2010	2011	2012
EUROPEAN	27	35	32	30	28
MAORI	3	5	5	3	6
PACIFIC PEOPLE	1	0	1	4	1
OTHER	0	3	3	1	3
<b>TOTAL</b>	<b>31</b>	<b>43</b>	<b>41</b>	<b>38</b>	<b>38</b>

## ORGAN AND TISSUE DONATION

Table 5:

**Organs and Tissues Retrieved from Deceased Donors and Transplanted**

	2008	2009	2010	2011	2012
KIDNEYS*	53	56(4)	56[8]	65[8]	54
HEARTS	10	11	11	12	12
LUNGS+	14	16	16	13	12
LIVER#	23	33	33	30	29
PANCREAS	4	2	2	3	2
CORNEAS#	15	13	13	16	14
HEART VALVES#	8	8	8	11	9
SKIN#	3	4	4	3	2

\* Single kidneys  
+ Number of lung recipients

( ) En-Bloc kidneys  
[ ] Double adult

# Number of donors of these organs/tissues

Table 6:

**Organs from New Zealand Deceased Donors Transplanted in Australia**

	2008	2009	2010	2011	2012
LIVER	2	5	5(2)	1	5(3)
HEART	2	0	0	1	0
LUNGS	2	8	3	3	1
KIDNEY	0	0	2	0	0

Table 7:

**Organs from Australian Deceased Donors Transplanted in New Zealand**

	2008	2009	2010	2011	2012
LIVER	9	3	6(1)	7(1)	8(1)
HEART	0	0	0	0	0
LUNGS	0	0	0	0	0
KIDNEY	0	0	0	0	0

( ) Split livers

In 2012 some organs from New Zealand donors were transplanted to Australian recipients and vice versa in accord with the trans-Tasman organ sharing agreement of the Transplant Society of Australia and New Zealand (TSANZ) which is available on their website: <http://www.tsanz.com.au>

Organ transplantation from deceased donors in New Zealand includes:

- Kidney transplantation, deceased and live-donor kidney transplantation, at Auckland City Hospital, Starship Children’s Hospital, Wellington Hospital and Christchurch Hospital
- Liver transplantation, live-donor adult-to-adult and adult-to-child transplantation, at Auckland City Hospital and Starship Children’s Hospital
- Heart and lung transplantation at Auckland City Hospital and Starship Children’s Hospital
- Pancreas transplantation at Auckland City Hospital.

Table 8:

**Kidney  
Tranplantation  
by Year and  
Donor Type**

**Kidney Transplantation**

	2008	2009	2010	2011	2012
RECIPIENTS, DECEASED DONOR, SINGLE KIDNEY	53	52	46	57	54
RECIPIENTS, DECEASED DONOR, DOUBLE KIDNEY	0	2	4	4	0
LIVING DONOR	69	67	60	57	54
<b>TOTAL</b>	<b>122</b>	<b>121</b>	<b>110</b>	<b>118</b>	<b>108</b>

In 2012 the first paired kidney exchange between two transplant centres took place at Auckland City and Wellington Hospitals. This involved two simultaneous live donor nephrectomies (one from an altruistic donor) and two simultaneous kidney transplants. The team at ODNZ assisted with the transport of the organs.

## ORGAN TRANSPLANTATION IN NEW ZEALAND

Table 9:

### Heart and Lung Transplantation by Year

#### Heart and Lung Transplantation

	2008	2009	2010	2011	2012
HEART	9	11	11	11	12
LUNGS	12	8	9	10	12

In 2012 the New Zealand Heart Transplant Service celebrated 25 years of transplantation. Since the first heart transplant in 1987 at Green Lane Hospital it has performed 253 heart transplants, an average of 10–14 a year. It is now considered the third largest heart transplant unit in Australasia after St Vincents in Sydney and The Alfred in Melbourne.

Hearty Towers, the residence for heart and lung recipients and their families, moved to new, refurbished premises at the old National Women's Hospital site in Auckland.

Table 10:

### Liver Transplantation by Year

#### Liver Transplantation

	2008	2009	2010	2011	2012
ADULT, DECEASED DONOR	27	28	29	31	26
ADULT, LIVE ADULT DONOR	3	2	0	2	0
CHILD, DECEASED DONOR	4	3	6	5	8
CHILD, LIVE ADULT DONOR	4	6	6	6	3
<b>TOTAL</b>	<b>38</b>	<b>39</b>	<b>41</b>	<b>44</b>	<b>37</b>

The New Zealand Liver Transplant Unit completed its 500th liver transplant in 2012, a milestone completed in less than 15 years since the inception of the programme. To mark the occasion there was a presentation at an Auckland City Hospital Grand Round where Professor Ed Gane pointed out that more than 80% of transplanted patients were still alive more than 10 years after their transplants, a result better than that seen in most centres around the world. Also, in 2012, ten years of paediatric liver transplantation in Auckland was celebrated.

Table 11:

### Pancreas Transplantation by Year

#### Pancreas Transplantation

	2008	2009	2010	2011	2012
PANCREAS	4	2	3	3	3

There have now been 40 pancreas transplants since 1998 when pancreas transplantation commenced in New Zealand. Of these transplants, 39 were combined with a kidney transplant.

ODNZ continued to work throughout 2012 to increase the opportunity for tissue donation, particularly in the Auckland region where multi-tissue (heart valve, skin and eye donation) can be facilitated. However, eye donation can be facilitated throughout New Zealand.

In 2012 tissue donation was facilitated by ODNZ from the following:

Table 12:

**Tissue Only Donation  
Facilitated by ODNZ**

REFERRED FROM	TISSUE (ONLY) DONORS
NORTH SHORE HOSPITAL (ICU & WARDS)	3
NORTH SHORE HOSPICE	2
AUCKLAND CITY HOSPITAL (DCCM, CVICU & WARDS)	14
STARSHIP CHILDREN'S PICU	3
CAUGHEY PRESTON REST HOME	1
MERCY HOSPICE	1
SOUTH AUCKLAND HOSPICE	2
WAIKATO HOSPITAL (ICU & WARDS)	4
TAURANGA HOSPITAL (WARD)	1
HUTT HOSPITAL (WARD)	1
WELLINGTON HOSPITAL (WARD)	1
CHRISTCHURCH HOSPITAL (ICU)	1
SOUTHLAND HOSPICE	1
HOME	2
<b>TOTAL</b>	<b>37</b>

In 2012 there were 37 tissue-only donors facilitated by ODNZ. This was a 60% increase from 2011.

Tissue-only donation is also facilitated by:

- The donor tissue co-ordinator from those having coronial autopsies at the Department of Forensic Pathology at Auckland City Hospital
- The corneal co-ordinators from the New Zealand National Eye Bank for eye-only donors referred directly to their service also including referrals from the Bereavement Team at Middlemore Hospital
- The heart and lung transplant co-ordinators from the explanted hearts from heart transplant recipients.

**Total Tissue Donation in New Zealand**

Table 13:

**Tissue Donation for  
Transplantation by  
Year**

	2008	2009	2010	2011	2012
SKIN	25	18	10	25	13
HEART VALVES	29	19	21	26	25
EYES	126	123	142	154	167

## NOTES

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