Chapter 7

Heart Donation in Australia and New Zealand



2016 Annual Report

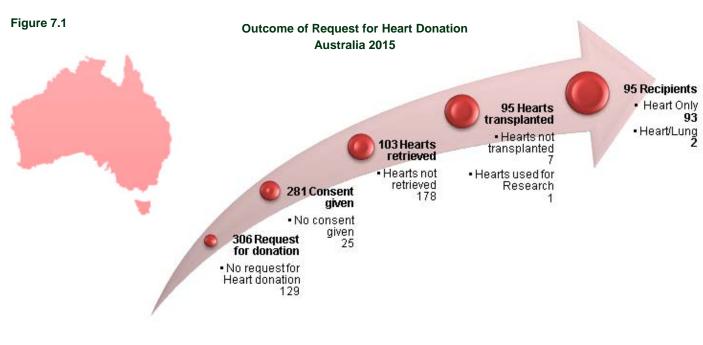
Data to 31-Dec-2015

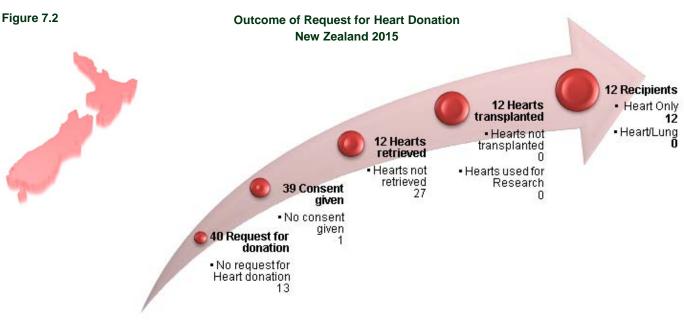
HEART DONATION

In 2015, there were 95 heart transplant recipients, including two heart/double lung transplant recipients. This was an increase of almost 56% for heart transplants since 2009.

New Zealand performed 12 heart transplants in 2015. This number has decreased by 29% from 2014, after being relatively stable over the past 8 years at between 9 and 12 heart transplants per year.

Figures 5.18 and 5.20 show the outcomes of requests for heart donation in Australia and New Zealand for 2015 respectively.





Figures 7.3 and 7.4 show the number of recipients of heart transplants in Australia and New Zealand respectively from 1998 to 2015. In Australia in 2014, the first heart transplant following donation after donor circulatory death was successfully performed.

Figure 7.3

Recipients of Heart Transplant by Donation Pathway
Australia 1998-2015

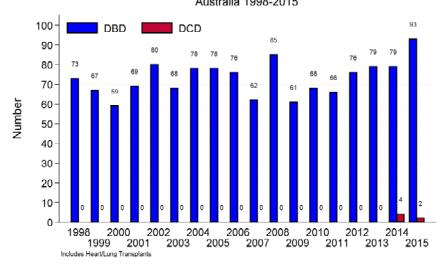


Figure 7.3

Recipients of Heart Transplant by Donation Pathway
New Zealand 1998-2015

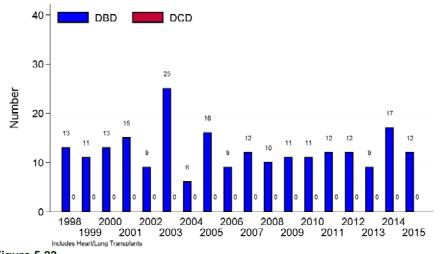
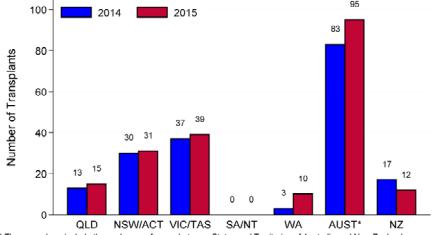


Figure 5.23

Deceased Donor Heart Transplant Recipients*
by Transplant State, Australia and New Zealand, 2014-2015



^{*} These numbers include the exchange of organ between States and Territories of Australia and New Zealand

HEART DONORS

The age of donors providing transplanted hearts for Australia and New Zealand are shown in Figures 5.20 and 5.21 respectively.

Figure 5.24

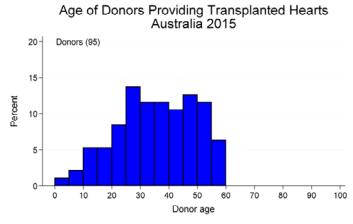
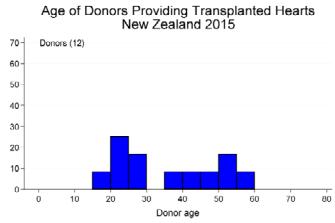


Figure 5.25



ECG AND ECHOCARDIOGRAM

In Australia, 86 donors (81%) had a normal ECG and 71 of the 88 heart donors (81.5%) had a normal echocardiogram. In New Zealand, all 12 heart donors had a normal ECG and 11 had a normal echocardiogram.

HEARTS NOT RETRIEVED

In 2015, there were 178 hearts not retrieved from Australian donors and 27 hearts not retrieved from New Zealand donors. For Australia, the main reason was due to the heart not being medically suitable (85) followed by age of donor (44), no suitable recipient for the heart (23), circulatory death preventing donation (12), consent withdrawn (6), logistics (4), trauma to the organ (2) and other reasons (2).

In New Zealand, twenty seven hearts were not retrieved as sixteen of the hearts were medically unsuitable, the age of the donor (5), trauma to the organ (3), there were no suitable recipients (2) and one heart was not retrieved due to logistics.

Table 7.1

Reasons Heart Not Retrieved, 2015						
Reason	Australia	New Zealand				
Logistics	4	1				
Not Medically Suitable	85	16				
Surgically Unsuitable	0	0				
Trauma to Organ	2	3				
No Suitable Recipients	23	2				
Age of Donor	44	5				
DCD Donor	12	0				
Consent Withdrawn	6	0				
Others	2	0				
Total	178	27				

HEARTS NOT UTILISED

Table 5.9

Reasons Hearts Retrieved and Not Utilised for Organ Transplantation in Australia (New Zealand) 20101- 2015						
Year	Logistics	Not Medically Suitable	Not Surgically Suitable	No Suitable Recipients	Other	Total
2011	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2012	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2013	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	1 (0)
2014	0 (0)	2 (0)	0 (0)	0 (0)	0 (0)	2 (0)
2015	1 (0)	4 (0)	0 (0)	1 (0)	1 (0)	7 (0)

Figures 7.8 and 7.9 show the non-utilisation rate of retrieved hearts – the proportion of hearts that were retrieved for the purpose of solid organ transplantation, but not ultimately transplanted into a recipient (either due to an absence of suitable recipients, or the heart being found to be medically or surgically unsuitable after retrieval).

In Australia, the non-utilisation rate increased to 14.1% in 2013 from 1.3% in 2009; dropping to 7.7% in 2015.

In New Zealand, there have been 100% utilisation of hearts retrieved for transplantation.

Figure 7.8

Discard rate of retrieved heart

Australia 2011-2015

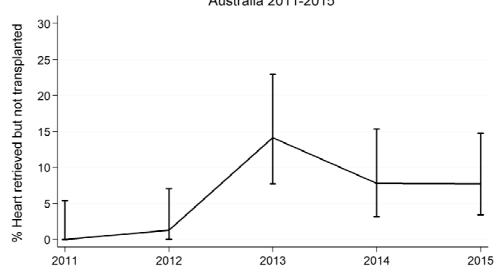


Figure 7.9

Discard rate of retrieved heart

New Zealand 2011-2015

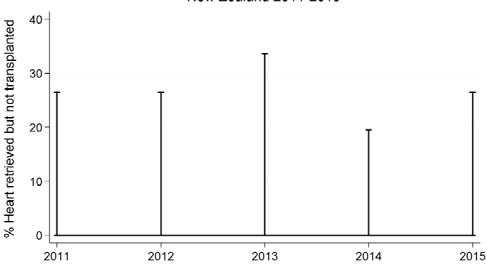


Table 7.3.1

Outcome of Request for Heart Donation,
Australia, 2011 - 2015

Outcome	2011	2012	2013	2014	2015
Total Donors	337	354	391	378	435
No Request for Heart Donation	101	96	121	99	129
Request for Heart Donation	236	258	270	279	306
Consent Not Given	9	11	13	30	25
Consent Given	227	247	257	249	281
Heart Not Retrieved	161	170	165	159	178
Heart Retrieved	66	77	92	90	103
Heart not used	0	0	1	2	7
Heart used for Research	0	1	12	5	1
Total Heart Transplanted	66	76	79	83	95
Recipients Transplanted	66	76	79	83	95
(Heart/Lung Transplanted)	2	4	2	4	2
Heart Discard Rate	0%	1.30%	14.13%	7.78%	7.77%
Heart Utilised Rate	100%	98.70%	85.87%	92.22%	92.23%

Table 7.3.2

Outcome of	Request	for Heart	Donation,
New	7 ealand	2011 - 20	15

Outcome	2011	2012	2013	2014	2015
Total Donors	38	38	36	46	53
No Request for Heart Donation	10	8	16	17	13
Request for Heart Donation	28	30	20	29	40
Consent Not Given	0	2	1	2	1
Consent Given	28	28	19	27	39
Heart Not Retrieved	16	16	10	10	27
Heart Retrieved	12	12	9	17	12
Heart not used	0	0	0	0	0
Heart used for Research	0	0	0	0	0
Total Heart Transplanted	12	12	9	17	12
Recipients Transplanted	12	12	9	17	12
(Heart/Lung Transplanted)	0	0	0	1	0
Heart Discard Rate	0%	0%	0%	0%	0%
Heart Utilised Rate	100%	100%	100%	100%	100%

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