

Chapter 3

Pathway of Organ Donation



in Australia and New Zealand



Pathway of Organ Donation

This chapter reports on the organ donation pathway from identification of a donor to the outcome of the donation. This includes the known intention to be an organ donor; cause of death and events leading up to admission to hospital; whom authority to donate was

sought by; whether the donation pathway did not proceed or proceeded down donation after brain death or donation after circulatory death; maintenance and terminal treatment of the donor and outcome of the retrieval procedure resulting in transplantation of donated organs.

DONOR INTENTION

Figures 3.1 and 3.2 show whether the donor had recorded an intention to donate through indication on their driver's licence. In 2012, 22% (77) of Australian organ donors and 3% (three) of New Zealand organ donors had indicated their intention to be an organ donor on their driver's license.

Figure 3.3 shows the number of donors enrolled in the Australian Organ Donation Registry, which commenced in 2000.

Figure 3.1

Driver's Licence Intention Status 2008 - 2012										
Intention	Australia					New Zealand				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
Yes	67 (26%)	73 (30%)	85 (28%)	80 (24%)	77 (22%)	2 (6%)	7 (16%)	5 (12%)	4 (11%)	3 (3%)
Not Applicable	56	49	126	113	158	2	3	0	3	3
No	55	42	31	45	38	1	0	0	1	2
Unknown	81	83	67	99	81	26	33	36	30	30
Total	259	247	309	337	354	31	43	41	38	38

* 'Not Applicable' is recorded for those donors who do not possess an Australian or New Zealand drivers license (for example infants, students or those who adults who chose not to obtain one)

Figure 3.2

Australian States 2012 (2011)								
Driver's Licence Intention Status								
Intention	QLD	NSW	ACT	VIC	TAS	SA	NT	WA
Yes	5 (7)	52 (51)	4 (1)	3 (2)	0 (1)	11 (15)	1 (0)	1 (3)
Not Applicable	69 (41)	7 (8)	3 (4)	41 (31)	8 (2)	2 (6)	1 (1)	27 (20)
No	2 (10)	23 (14)	5 (3)	0 (6)	0 (1)	1 (0)	4 (2)	3 (9)
Unknown	2 (9)	7 (4)	0 (0)	47 (68)	7 (2)	15 (14)	2 (1)	1 (1)
Total	78 (67)	89 (77)	12 (8)	91 (107)	15 (6)	29 (35)	8 (4)	32 (33)

Pathway of Organ Donation



Figure 3.3

Donors Enrolled in the Australian Organ Donor Registry 2012 (2011)									
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST
Yes	28 (21)	32 (22)	7 (0)	15 (26)	6 (2)	5 (17)	3 (1)	14 (16)	110 (105)
Not Applicable ^	4 (6)	3 (6)	1 (1)	6(0)	1 (0)	0 (0)	1 (1)	3 (1)	19 (15)
No	1 (0)	0 (0)	0 (0)	0 (0)	1 (0)	2 (0)	0 (0)	1 (0)	5 (0)
Not Registered	42 (40)	51 (49)	4 (7)	67 (79)	6 (4)	22 (18)	4 (2)	13 (15)	209 (214)
Not Accessed	3 (0)	3 (0)	0 (0)	3 (2)	1 (0)	0 (0)	0 (0)	1(1)	11 (3)
Total	78 (67)	89 (77)	12 (8)	91 (107)	15 (6)	29 (35)	8 (4)	32 (33)	354 (337)

^ Not Applicable refers to children less than 16 years of age and non-resident donors (e.g. tourists and visitors)

CORONER'S CASES

In Australia, 43% of donors in 2012 were subject to Coronial inquiry, compared to 42% in 2011. In New Zealand it was 50% for 2012 and 42% in 2011.

Figure 3.4

Coroner's Cases 2008 - 2012										
	Australia					New Zealand				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
Yes	120	106	121	141	153	12	19	18	16	19
No	139	141	188	196	201	19	24	23	22	19
Total	259	247	309	337	354	31	43	41	38	38

Figure 3.5

Australian States Coroner's Cases 2012 (2011)										
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ
Yes	39 (31)	34 (29)	6 (6)	34 (39)	7 (2)	13 (17)	2 (2)	18 (15)	153 (141)	19 (16)
No	39 (36)	55 (48)	6 (2)	57 (68)	8 (4)	16 (18)	6 (2)	14 (18)	201 (196)	19 (22)
Total	78 (67)	89 (77)	12 (8)	91 (107)	15 (6)	29 (35)	8 (4)	32 (33)	354 (337)	38 (38)



Pathway of Organ Donation

CAUSE OF DEATH - ALL DONORS

In Australia and New Zealand, road trauma continues to be a reducing cause of death while cerebrovascular accident (CVA) has been increasing in Australia since 1989, although in New Zealand figures have remained steady.

In Australia for the period 2008 - 2012, CVA accounted for an overall 49% of donor deaths and road trauma 12%.

Figure 3.6 shows the cause of death by percentage in

Australia and each Australian State and New Zealand over the last 5 years.

Figure 3.7 shows that CVA is the main cause of death in donors 55 years and older, 68% in Australia and 64% in New Zealand, whereas in the younger 15-34 year age group, Hypoxia-Anoxia accounted for 23% of all deaths in Australia and 21% in New Zealand in 2012.

The cause of death by age group is shown in Figure 3.8 for each Australian State for 2012.

Figure 3.6

Cause of Donor Death 2008 - 2012										
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ
CVA	43%	50%	31%	51%	45%	52%	58%	47%	49%	51%
Trauma (road)	18%	10%	8%	8%	9%	9%	21%	19%	12%	16%
Trauma (non-road)	14%	11%	3%	8%	16%	11%	5%	10%	10%	11%
Hypoxia-Anoxia	19%	23%	13%	28%	20%	22%	11%	17%	23%	16%
Cerebral Tumour	1%	1%	1%	0%	9%	1%	5%	7%	1%	1%
Other	4%	6%	0%	5%	0%	5%	0%	0%	5%	6%

Figure 3.7

Cause of Donor Death Related to Age Group 2012										
	Australia					New Zealand				
	Age Groups				Total	Age Groups				Total
	0-14	15-34	35-54	>=55		0-14	15-34	35-54	>=55	
CVA	1	14	67	92	174 (49%)	0	0	8	7	15 (39%)
Trauma (road)	2	22	8	6	38 (11%)	1	1	1	1	4 (11%)
Trauma (non-road)	1	11	11	14	37 (10%)	0	1	4	1	6 (16%)
Hypoxia-Anoxia	6	24	36	17	83 (23%)	1	1	5	1	8 (21%)
Cerebral Tumour	0	0	1	0	1 (<1%)	0	0	0	0	0 (0%)
Other	1	10	3	7	21 (6%)	0	3	1	1	5 (13%)
Total	11	81	126	136	354	2	6	19	11	38

Pathway of Organ Donation



Figure 3.8

Australian States						
		Age Groups				
		0-14	15-34	35-54	>=55	Total
Queensland	CVA	0	3	17	15	35
	Trauma (road)	0	6	4	0	10
	Trauma (non-road)	1	3	4	1	9
	Other	0	14	6	4	24
	Total	1	26	31	20	78
New South Wales	CVA	0	5	15	21	41
	Trauma (road)	0	6	0	3	9
	Trauma (non-road)	0	1	3	7	11
	Other	2	7	11	8	28
	Total	2	19	29	39	89
Australian Capital Territory (ACT)	CVA	0	0	2	6	8
	Trauma (road)	0	1	0	1	2
	Trauma (non-road)	0	0	0	1	1
	Other	0	0	1	0	1
	Total	0	1	3	8	12
Victoria	CVA	1	3	14	30	48
	Trauma (road)	2	2	2	1	7
	Trauma (non-road)	0	2	3	2	7
	Other	2	5	13	9	29
	Total	5	12	32	42	91
Tasmania	CVA	0	0	4	4	8
	Trauma (road)	0	1	0	1	2
	Trauma (non-road)	1	0	1	0	2
	Other	0	2	1	0	3
	Total	1	3	6	5	15
South Australia	CVA	0	1	6	8	15
	Trauma (road)	0	4	0	0	4
	Trauma (non-road)	0	2	0	0	2
	Other	0	3	3	2	8
	Total	0	10	9	10	29
Northern Territory	CVA	0	1	4	1	6
	Trauma (road)	0	0	0	0	0
	Trauma (non-road)	0	0	0	0	0
	Other	0	2	0	0	2
	Total	0	3	4	1	8
Western Australia	CVA	0	1	5	7	13
	Trauma (road)	0	3	2	1	6
	Trauma (non-road)	0	2	1	2	5
	Other	2	1	4	1	8
	Total	2	7	12	11	32



Pathway of Organ Donation

CARDIOPULMONARY RESUSCITATION

Cardiopulmonary resuscitation is recorded for events leading up to the admission and hospital stay for the patient, prior to organ donation (Figures 3.9 and 3.10).

Figure 3.9

Cardiopulmonary Resuscitation 2008 - 2012										
	Australia					New Zealand				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
Yes	83	89	112	111	130	11	13	15	13	14
No	176	158	197	226	224	19	30	26	25	24
Unknown	0	0	0	0	0	1	0	0	0	0
Total	259	247	309	337	354	31	43	41	38	38

Figure 3.10

Australian States Cardiopulmonary Resuscitation 2012 (2011)								
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA
Yes	51 (57)	56 (54)	10 (4)	54 (59)	12 (3)	19 (23)	5 (4)	17 (22)
No	27 (10)	32 (23)	2 (4)	38 (48)	3 (3)	10 (12)	3 (0)	15 (11)
Total	78 (67)	88 (77)	12 (8)	92 (107)	15 (6)	29 (35)	8 (4)	32 (33)

Pathway of Organ Donation



AUTHORITY SOUGHT FOR ORGAN DONATION

The predominant group requesting authority for organ donation in 2012 were the Intensive Care Clinicians and Registrars, (65%) in Australia and (90%) in New Zealand shown in Figure 3.11.

In Australia, authority for organ donation was sought by donor coordinators in only one case (Figure 3.11).

See Figure 3.12 for individual State and Territory statistics.

Authority for organ donation was not sought by donor coordinators in New Zealand.

In 2012, 31% of families volunteered authority for organ donation in Australia, down 5%, compared to 36% in 2011 (Figure 3.11).

In New Zealand, 5% volunteered authority in 2012 compared to 13% in 2011 and 22% in 2010.

Figure 3.11

Authority to Donate 2008 - 2012										
	Australia					New Zealand				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
ICU Clinician	153	147	200	179	214	19	31	29	30	33
ICU Registrar	10	4	13	18	15	0	2	1	1	1
Emergency Consultant/Registrar	6	2	9	14	7	0	0	0	0	0
Other Physicians/Anaesthetist	1	0	0	1	2	2	2	1	2	2
Donor Coordinator	4	2	2	1	1	0	0	0	0	0
Volunteered by Family	83	90	82	123	110	8	7	9	5	2
Drivers Licence - No Family	0	0	0	0	1	0	0	0	0	0
Nursing Staff - Social Worker	0	2	2	1	4	2	1	1	0	0
Accident and Emergency Staff	2	0	0	0	0	0	0	0	0	0
Unknown	0	0	1	0	0	0	0	0	0	0
Total	259	247	309	337	354	31	43	41	38	38

Figure 3.12

Authority to Donate 2012 (2011)								
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA
ICU Clinician	41 (23)	70 (53)	7 (5)	40 (56)	9 (4)	20 (13)	8 (3)	19 (22)
ICU Registrar	2 (3)	2 (3)	0 (1)	6 (10)	0 (0)	2 (1)	0 (0)	3 (3)
Emergency Consultant/Registrar	0 (0)	2 (1)	0 (1)	4 (11)	0 (0)	0 (0)	0 (0)	1 (1)
Other Physicians/Anaesthetist	0 (0)	0 (0)	0 (0)	2 (1)	0 (0)	0 (0)	0 (0)	0 (0)
Donor Coordinator	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1)
Volunteered by Family	35 (43)	14 (20)	4 (2)	37 (28)	6 (2)	7 (21)	0 (1)	7 (6)
Drivers Licence - No Family	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nursing Staff - Social Worker	0 (0)	0 (0)	1 (0)	2 (1)	0 (0)	0 (0)	0 (0)	1 (0)
Total	78 (67)	89 (77)	12 (8)	91 (107)	15 (6)	29 (35)	8 (4)	32 (33)



Pathway of Organ Donation

DONATION NOT PROCEEDING

An intended donor is a person from whom authority has been given or volunteered, but organ donation did not proceed. For example a donation may not proceed due to positive virology tests, cardiac arrest or further investigations discovered a cancer or infection. An example why an intended DCD donor may not proceed to donation could be the time to cardiac standstill has been exceeded.

In Australia, there were 75 donors who did not proceed down the donation pathway and reasons for this are described in Figure 3.14. Twenty donors (27%) were following the DBD pathway and 55 (73%) were of the DCD pathway (Figure 3.13).

Figure 3.13

Actual vs Intended (Non-Proceeding) Donors 2012						
	DBD		DCD		Total	
	Actual	Intended	Actual	Intended	Actual	Intended
QLD	62 (91%)	6 (9%)	16 (59%)	11 (41%)	78 (82%)	17 (18%)
NSW	69 (95%)	4 (5%)	19 (56%)	15 (44%)	88 (82%)	19 (18%)
ACT	10 (100%)	-	2 (100%)	-	12 (100%)	-
VIC	62 (92%)	5 (8%)	30 (52%)	28 (48%)	92 (73%)	33 (27%)
TAS	15 (100%)	-	-	-	15 (100%)	-
SA	25 (93%)	2 (7%)	4 (80%)	1 (20%)	29 (91%)	3 (9%)
NT	7 (100%)	-	1 (100%)	-	8 (100%)	-
WA	27 (90%)	3 (10%)	5 (100%)	-	32 (91%)	3 (9%)
AUST	277 (93%)	20 (7%)	77 (58%)	55 (42%)	354 (83%)	75 (17%)
NZ	38 (100%)	-	-	-	38 (100%)	-

Figure 3.14

Reasons Why Donation Did Not Proceed 2012	
Australia and New Zealand	
Did not proceed to cardiac standstill - DCD donors (23)	
Consent withdrawn (5)	Disease of organs (13)
Extended ischaemic time (8)	High Risk on Medical Social Form (3)
IV Drug Use (3)	Medically Unsuitable (11)
Malignancy (3)	Pathologist Refusal (2)
No Suitable recipients (4)	



Pathway of Organ Donation

DONATION AFTER CARDIAC DEATH

Australia

The majority of organs are donated by donation after brain death (DBD) donors.

After certification of brain death, the donor remains on the ventilator and the removal of organs may occur many hours later.

Donation after circulatory death (DCD) donors are defined as patients accordingly using the criterion of irreversible cessation of circulation.

As soon as cessation of circulation is confirmed the retrieval procedure is commenced in order to minimise warm ischaemic time.

The number of DCD donors since 1989 has risen to 363 donors for Australia and yet remained the same at nine donors for New Zealand.

In 2012 there were 77 DCD donors; 30 in Victoria, 19 in New South Wales, 16 in Queensland, four in South Australia, five in Western Australia, two in the Australian Capital Territory (ACT) and one in the Northern Territory (Figure 3.15)

The first multi-organ DCD was performed in South Australia in 2006.

In 2012, the mean age for a DCD donor was 47.5 years and age range was 14.7 years to 73.2 years.

Causes of death leading to donation after circulatory death in 2012 were CVA (22), hypoxia-anoxia (22), road trauma (9), other trauma (8), cerebral oedema (1) and other causes (15).

Three of the 77 actual DCD donors in 2012 did not have any organs transplanted, but all of those donors went on to become tissue donors with corneas sent to the Tissue Bank.

There were 55 intended DCD donors during 2012; 25 did not proceed to cardiac standstill; eight had disease of organs; eight had extended ischaemic times; three each were medically unsuitable, had no suitable recipients or consent withdrawn; two had a malignancy; and one each was high risk on medical social assessment, IV drug use and pathologist refusal.

New Zealand

There were no DCD donors in New Zealand in 2012.

Figure 3.15

Donation After Circulatory Death 2008 - 2012										
YEAR	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ
2008	5	10	2	3	0	3	0	0	23	2
2009	5	15	2	17	0	3	0	0	42	2
2010	13	24	3	24	0	5	0	0	69	1
2011	18	18	2	32	0	8	1	7	86	2
2012	16	19	2	30	0	4	1	5	77	0



Pathway of Organ Donation

TIME FROM ADMISSION TO BRAIN DEATH

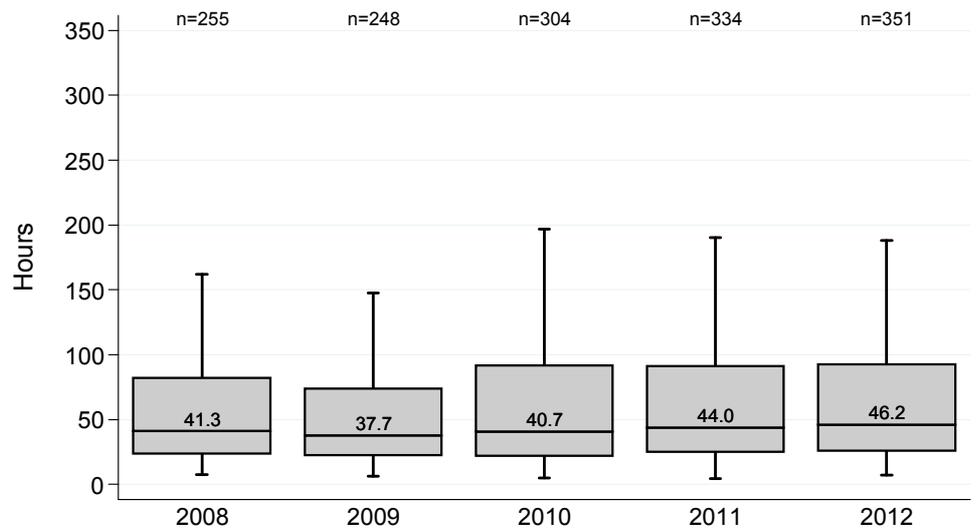
AUSTRALIA

In 2012, 20.1% of Australian donors were declared brain dead within 23 hours of hospital admission.

The median time from admission to brain death was 46.2 hours.

Seventeen percent (59 donors) were in hospital for more than five days.

Figure 3.16 Time from Admission to Brain Death Australia 2008-2012



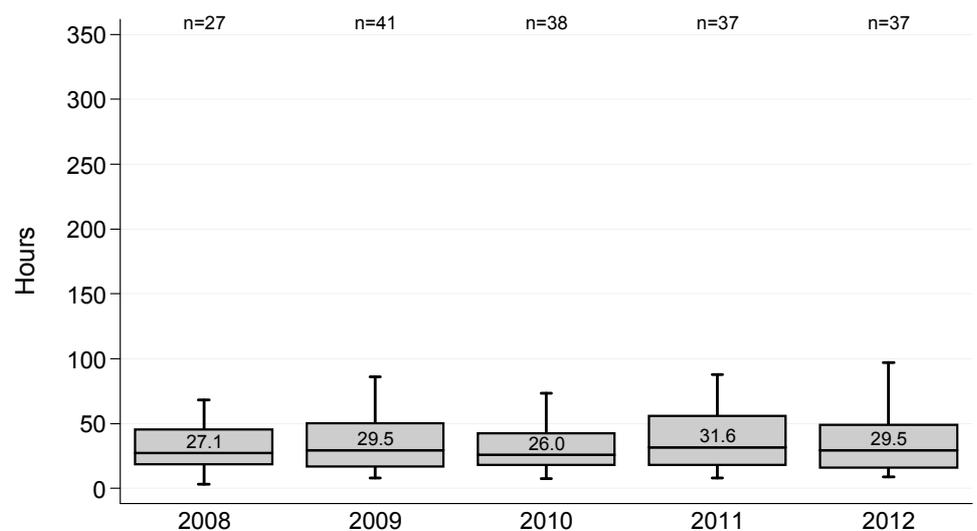
NEW ZEALAND

In 2012, 39.5% of New Zealand donors were declared brain dead within 23 hours of hospital admission.

Time of admission to hospital was unknown in only one donor. The median time from admission to brain death was 29.5 hours.

Eight percent (three donors) were in hospital for more than five days.

Figure 3.17 Time from Admission to Brain Death New Zealand 2008-2012



* For DCD donors, this is the time from admission to cardiac death

** Excluded from analysis are donors in Australia and New Zealand where no admission date was reported.

Pathway of Organ Donation



TIME FROM VENTILATION TO BRAIN DEATH

Figure 3.18

**Time from Ventilation to Brain Death
Australia 2008-2012**

AUSTRALIA

In 2012, the median time from ventilation to brain death was 44.4 hours.

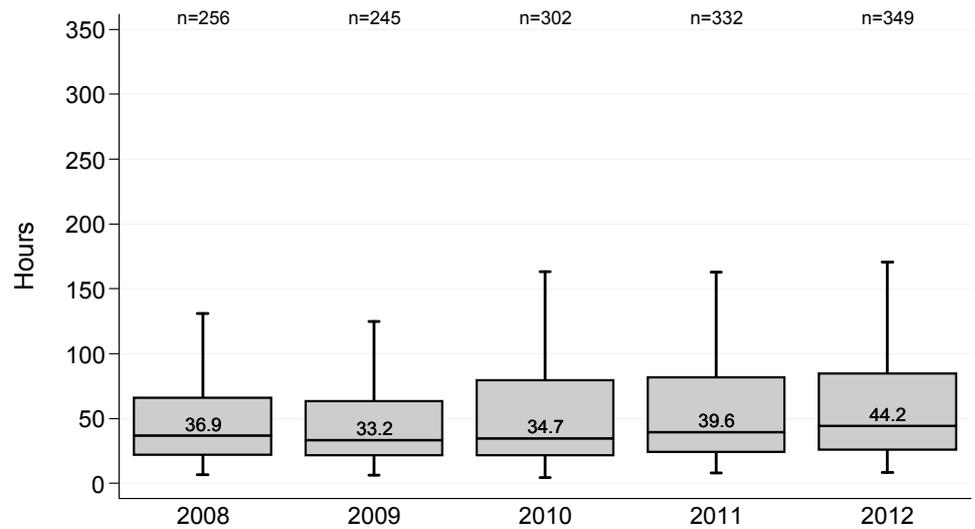
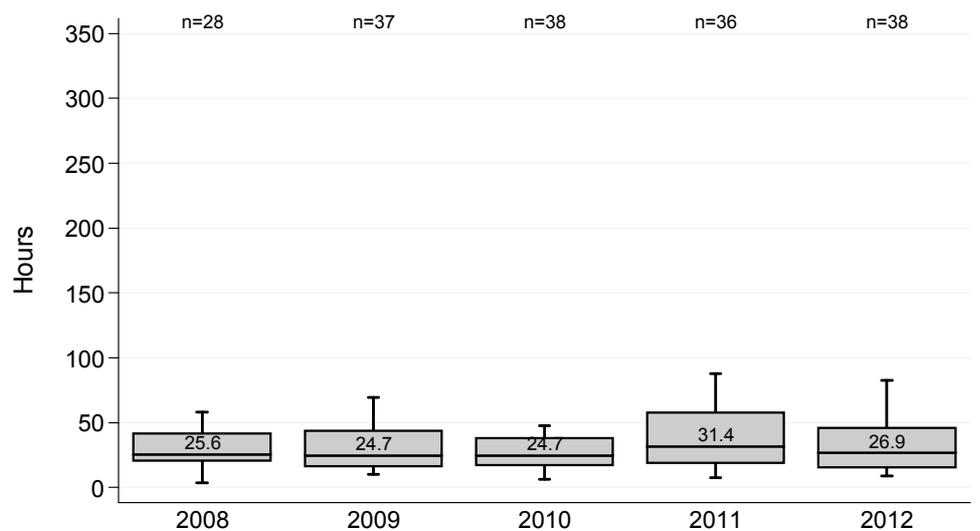


Figure 3.19

**Time from Ventilation to Brain Death
New Zealand 2008-2012**

NEW ZEALAND

The median time in New Zealand from ventilation to brain death was 27.1 hours.



* For DCD donors, this is the time from ventilation to cardiac death

** Excluded from analysis were donors in Australia with no ventilation date reported.



Pathway of Organ Donation

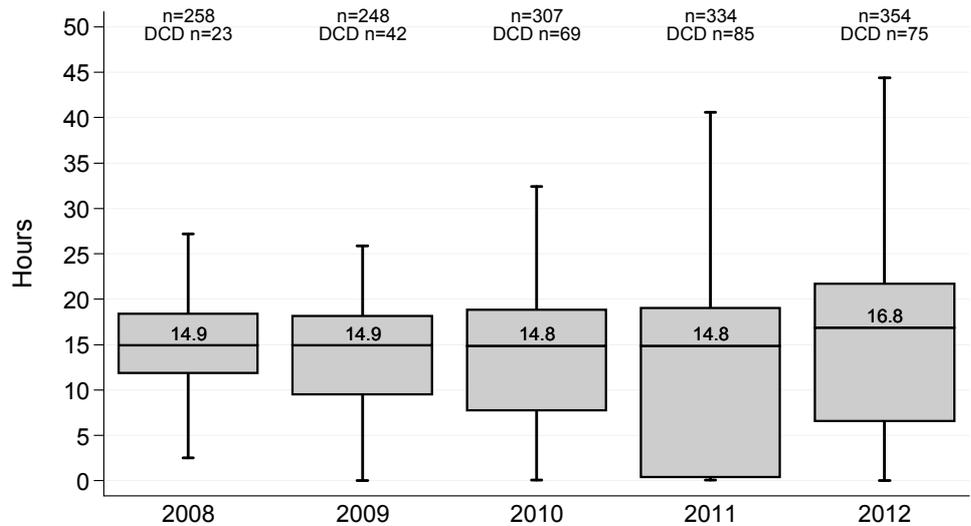
TIME FROM BRAIN DEATH TO AORTIC CROSS CLAMP

Figure 3.20 Time from Brain Death to Aortic Cross Clamp Australia 2008-2012

AUSTRALIA

In 2012, 50 heart beating donors (18%) had undergone aortic cross clamp within twelve hours of the certification of brain death.

The median time was 18.5 hours.

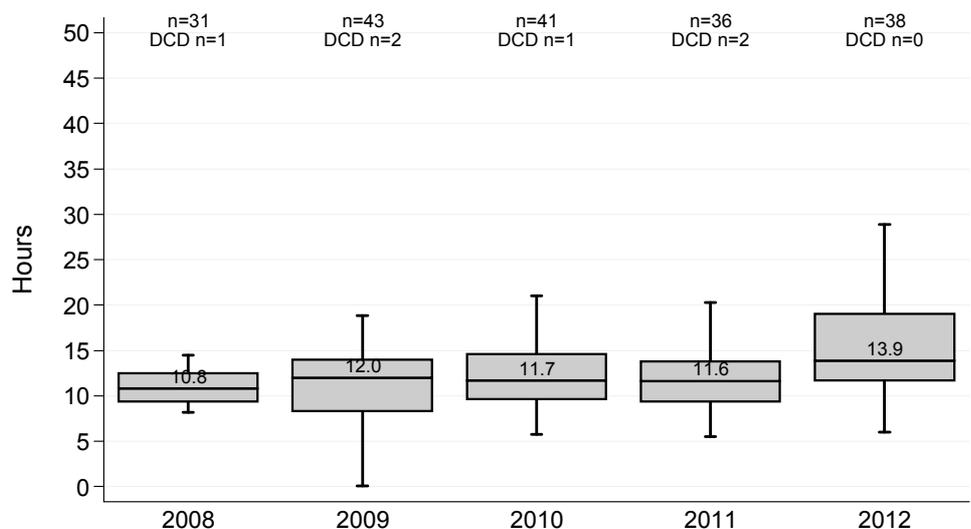


NEW ZEALAND

In 2012, 9 heart beating donors (24%) had undergone aortic cross clamp within twelve hours of the certification of brain death.

The median time was 14.2 hours.

Figure 3.21 Time from Brain Death to Aortic Cross Clamp New Zealand 2008-2012





DONOR MAINTENANCE

DRUGS FOR MAINTENANCE OF THE DONOR

(GIVEN IN THE INTENSIVE CARE/CRITICAL CARE UNIT)

AUSTRALIA

There were 24 donors (7%) who did not require maintenance drug support in 2012. Fifteen were DCD donors.

Antidiuretic agents (desmopressin/vasopressin) were prescribed to 62% (220) of all donors.

MAP <50 mm Hg

Mean arterial blood pressure (MAP) <50 mm Hg was recorded in 3% (12) of donors in Australia, in 2012. Five donors had a duration of less than one hour and seven donors had one hour or longer. Range was 15 minutes to 24 hours.

NEW ZEALAND

In 2012 there were 3% (1) of donors who did not require inotropic support.

Antidiuretic agents were prescribed to 67% (26) of all donors.

MAP <50 mm Hg

Two donors were reported with a mean arterial blood pressure (MAP) <50 mmHg with a duration of one hour.

TERMINAL TREATMENT

(PROVIDED IN THE OPERATING THEATRE)

AUSTRALIA

There were 52 donors who did not receive any heparin as part of their terminal treatment in 2012. Forty four of those donors were DCD (donation after circulatory death) donors.

Forty donors did not receive any terminal treatment; 37 of those were DCD donors.

NEW ZEALAND

There was one donor who did not receive any heparin, nor any other drugs as part of their terminal treatment in 2012. This was a heart beating donor.



Pathway of Organ Donation

SUMMARY - ORGANS REQUESTED, CONSENT GIVEN, RETRIEVED AND TRANSPLANTED

The information relating to the request for organ donation refers only to those patients who become actual organ donors. If consent was sought and refused, the Registry has no record of these potential donors.

The difference between a request and a consent is a known objection by the donor or family refusal for the specific organ. Reasons for not requesting organs, not retrieving and not transplanting are documented for all of the specific organs.

For further details see Appendix I for Australia and Appendix II for New Zealand. Figure 3.22 shows the outcome of organs requested in 2012 (2011).

Figure 3.22

Outcome Following Request for Organ Donation 2012 (2011)							
		Kidneys	Liver	Heart	Lungs	Pancreas	Stomach/ Intestines
Australia	Requested	690 (658)	334 (295)	258 (236)	594 (594)	266 (264)	40 (39)
	Consent Given	688 (656)	329 (295)	247 (227)	586 (586)	258 (259)	34 (34)
	Retrieved	636 (605)	218 (200)	77 (66)	308 (308)	70 (76)	0 (0)
	Recipients Transplanted	607 (570)	230 (213)	76 (66)	144 (306)	(+42) (+35)	0 (0)
New Zealand	Requested	74 (76)	37 (37)	30 (28)	66 (58)	22 (29)	0 (0)
	Consent Given	72 (76)	36 (37)	28 (28)	62 (58)	22 (29)	0 (0)
	Retrieved	57 (66)	30 (30)	12 (12)	56 (26)	3 (4)	0 (0)
	Recipients Transplanted	54 (61)	32 (30)	12 (12)	28 (26)	2 (3)	0 (0)

Kidneys and lungs are counted as separate organs
+ Includes (4) 2012 and (9) 2011 pancreas islet transplants

ORGANS REQUESTED

The requests for specific organs in Australia in 2012 from 354 organ donors were: kidneys 97.5%, liver 94.4%, heart 72.9%, lungs 87.8% and pancreas 75.1%.

From the 38 New Zealand donors in 2012, the requests for specific organs were: kidneys 97.4%, liver 97.4%, heart 78.9%, lungs 86.8% and pancreas 58.0%.



Pathway of Organ Donation

ORGANS RETRIEVED



The organs retrieved in each donor state by retrieval state team is detailed in the Supplement 1 - Australia and Supplement 2 - New Zealand, at the end of this report.

Of all organs retrieved in Australia only 3% (39) were not used and 2% (26) went to research. Of those used for research the majority (18) were pancreas islets, 4 double lungs and one each of the organ kidney, liver, heart and pancreas. The reason organs were not used are identified in Chapter 5 - Organ Data and in Supplement 1 for Australia and Supplement 2 for New Zealand.

MULTIPLE ORGAN RETRIEVAL

There were 87 (25%) of Australian donors in 2012 who donated solid organs, who had a single organ retrieved, shown in Figure 3.23. Kidney only donation occurred in 70 cases.

Twelve donors in Australia went to theatre, but no solid organs were retrieved.

New Zealand had five single organ donors in 2012, two donating kidneys, two donating a liver and one donating a lung.

In Australia 72% (255) donors and in New Zealand 76% (29) donors had two or more organs retrieved for the purpose of transplantation.

Figure 3.23

Multiple Organ Retrieval 2008 - 2012										
Number of Organs	Australia					New Zealand				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
No organs	4 (2%)	7 (3%)	7 (2%)	8 (2%)	12 (3%)	0 (0%)	2 (5%)	3 (8%)	3 (8%)	4 (11%)
Single	44 (17%)	43 (17%)	60 (19%)	89 (26%)	87 (25%)	6 (19%)	7 (16%)	9 (22%)	4 (11%)	5 (13%)
Two	60 (23%)	55 (22%)	98 (32%)	97 (29%)	107 (30%)	7 (23%)	15 (35%)	12 (29%)	10 (26%)	12 (32%)
Three	64 (25%)	60 (24%)	61 (20%)	75 (22%)	76 (21%)	12 (39%)	14 (33%)	12 (29%)	16 (42%)	8 (21%)
Four	52 (20%)	47 (19%)	54 (17%)	45 (13%)	50 (14%)	5 (16%)	4 (9%)	5 (12%)	5 (13%)	9 (23%)
Five	35 (14%)	35 (14%)	29 (9%)	23 (7%)	22 (6%)	1 (3%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)

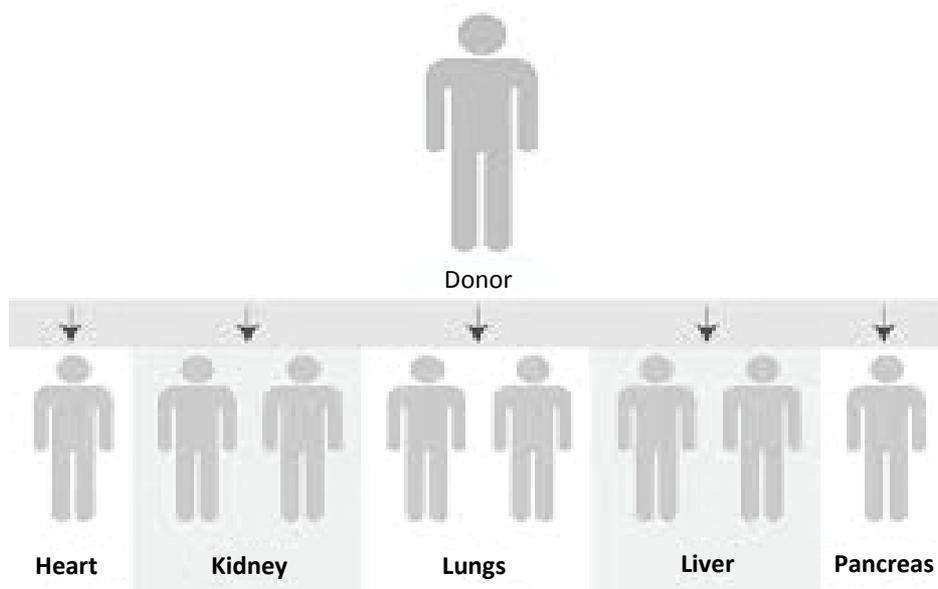


Pathway of Organ Donation

Figure 3.24

State/Country Comparison of Multiple Organ Retrieval 2012										
Number Of Organs	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ
No organs	3 (4%)	6 (7%)	2 (17%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	12 (3%)	4 (11%)
One	20 (26%)	20 (23%)	3 (25%)	24 (26%)	4 (27%)	6 (21%)	1 (13%)	9 (28%)	87 (25%)	5 (13%)
Two	27 (35%)	28 (32%)	3 (25%)	29 (32%)	0 (0%)	7 (24%)	2 (25%)	11 (34%)	107 (30%)	12 (32%)
Three	16 (21%)	18 (20%)	3 (25%)	23 (25%)	3 (20%)	6 (21%)	3 (38%)	4 (13%)	76 (21%)	8 (21%)
Four	10 (13%)	12 (14%)	0 (0%)	13 (14%)	4 (27%)	4 (14%)	1 (13%)	6 (19%)	50 (14%)	9 (24%)
Five	2 (3%)	4 (5%)	1 (8%)	2 (2%)	4 (27%)	6 (21%)	1 (13%)	2 (6%)	22 (6%)	0 (0%)

For the above donor counts, 2 kidneys = 1 organ, 2 lungs = 1 organ
 On occasions when only one kidney or one lung is retrieved, this is also defined as one organ



One donor can benefit the lives of a number of recipients suffering end stage organ disease.