SECTION 3

Deceased Organ Donor Pathway

SUMMARY

This section summarises organ donation in Australia and New Zealand. Figures reported here include the number of donors per million population; and number of transplant recipients and organs transplanted during 2018 in comparison to previous years.

Contents

Suggested Citation

ANZOD Registry. 2019 Annual Report, Section 3: Deceased Organ Donor Pathway. Australia and New Zealand Dialysis and Transplant Registry, Adelaide, Australia. 2019.
Available at: https://www.anzdata.org.au/report/anzod-annual-report-2019/

Registration of Intent to Donate

The Registry collects the intention to be an organ donor in the form of a decision recorded on a national register.

In Australia, the Australian Organ Donor Register* is the national register for people to record their stated intent about becoming an organ and tissue donor for transplantation after death. This provides a record of a person's donation decision for families and clinicians in the event of their death and can only be verified by authorised medical personnel. The Australian Organ Donor Register (the Donor Register) is managed by the Department of Human Services on behalf of the Australian Government.

Only people aged 18 years and over can register a legally valid consent or objection on the Australian Organ Donor Register. People aged less than 18 years can become organ and tissue donors; for this group consent is sought from family/next of kin at the time of death.

Table 3.1 Actual Donors Enrolled in the Australian Organ Donor Register* 2018 (2017)

	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST
Registered as Yes	38 (35)	66 (55)	8 (5)	48 (40)	5 (8)	16 (13)	1 (1)	15 (17)	**197 (174)**
Registered as No	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**1 (0)**
Not Registered	50 (66)	78 (66)	13 (9)	139 (100)	7 (11)	18 (19)	3 (2)	25 (33)	**333 (306)**
Not Accessed	6 (4)	7 (14)	0 (0)	5 (8)	2 (0)	2 (0)	0 (0)	1 (4)	**23 (30)**
Total	**94 (105)**	**151 (135)**	**21 (14)**	**193 (148)**	**14 (19)**	**36 (32)**	**4 (3)**	**41 (54)**	**554 (510)**

** The Australian Organ Donor Register (the Donor Register) is managed by the Department of Human Services on behalf of the Australian Government, not by ANZOD. The Donor Register is the only national register for people to record their decision about becoming an organ and tissue donor for transplantation after death. Registering is voluntary and people have complete choice over which organs and tissues they wish to donate. If a person does not want to become an organ and tissue donor, they can register their decision not to donate on the Donor Register which is available at http://www.medicareaustralia.gov.au/provider/patients/aodr/index.isp*

Coroner's Cases

Table 3.2 shows the number of actual donors subject to Coronial inquiry. In Australia, 49% of donors in 2018 were subject to Coronial inquiry, compared to 50% in 2017. In New Zealand, it was 52% for 2018 and 29% in 2017.

Table 3.2 Coroner's Cases 2014 - 2018

	Australia					New Zealand				
	2014	**2015**	**2016**	**2017**	**2018**	**2014**	**2015**	**2016**	**2017**	**2018**
Yes	166	211	235	253	272	23	25	20	21	32
No	212	224	268	257	282	23	28	41	52	30
Total	**378**	**435**	**503**	**510**	**554**	**46**	**53**	**61**	**73**	**62**

Table 3.3 shows the number of Australian Coroner's cases by jurisdiction and the number of Coroner's cases in New Zealand for 2018 compared to 2017.

Table 3.3 Coroner's Cases by State and Country 2018 (2017)

	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ
Yes	56 (55)	68 (59)	11 (7)	87 (72)	6 (7)	20 (20)	4 (2)	20 (31)	**272 (253)**	**32 (21)**
No	38 (50)	83 (76)	10 (7)	106 (76)	8 (12)	16 (12)	0 (1)	21 (23)	**282 (257)**	**30 (52)**
Total	**94 (105)**	**151 (135)**	**21 (14)**	**193 (148)**	**14 (19)**	**36 (32)**	**4 (3)**	**41 (54)**	**554 (510)**	**62 (73)**

Cause of Death – All Donors

Table 3.4 shows the cause of death by percentage in Australia, for each Australian State, and New Zealand over the last five years.

In Australia for the period 2014-2018, intracranial haemorrhage accounted for an overall 38% of donor deaths and traumatic brain injury for 16%; New Zealand had a greater proportion of intracranial haemorrhage (45%).

Table 3.4 Cause of Donor Death 2014 - 2018 (%)

Cause of Death	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ
Intracranial Haemorrhage	34%	40%	34%	36%	48%	39%	42%	38%	**38%**	**45%**
Traumatic Brain Injury	22%	14%	22%	15%	15%	15%	0%	13%	**16%**	**22%**
Cerebral Infarct	4%	5%	9%	7%	6%	9%	13%	8%	**6%**	**7%**
Cerebral Hypoxia / Ischaemia	38%	35%	32%	36%	26%	34%	46%	39%	**36%**	**21%**
Other Neurological Condition	1%	2%	1%	2%	5%	2%	0%	1%	**2%**	**3%**
Non-Neurological Condition	1%	3%	3%	5%	0%	2%	0%	0%	**3%**	**2%**

Table 3.5 shows the cause of death of donors by age group in 2018 in Australia and New Zealand. In donors aged 55 years and older, intracranial haemorrhage accounted for 56% of deaths in Australia and 48% in New Zealand in 2018, but a diminishing proportion in younger age groups.

Conversely, among donors aged 15-34 years, cerebral hypoxia/ischaemia accounted for 54% of deaths in Australia and 21% in New Zealand in 2018.

Table 3.5 Cause of Donor Death by Age Group 2018

Cause of Death	Australia					New Zealand				
	0-14	15-34	35-54	55+	n (%)	0-14	15-34	35-54	55+	n (%)
Intracranial Haemorrhage	1	9	68	121	199 (36%)	0	2	8	13	23 (37%)
Traumatic Brain Injury	5	34	23	26	88 (16%)	0	11	5	5	21 (34%)
Cerebral Infarct	1	3	14	15	33 (6%)	0	0	1	4	5 (8%)
Cerebral Hypoxia / Ischaemia	9	60	91	48	208 (38%)	1	4	1	2	8 (13%)
Other Neurological Condition	0	4	7	1	12 (2%)	0	2	0	0	2 (3%)
Non-Neurological Condition	0	2	6	6	14 (3%)	0	0	0	3	3 (5%)
Total	**16**	**112**	**209**	**217**	**554**	**1**	**19**	**15**	**27**	**62**

Table 3.6 Cause of Death by Age Group and Australian State 2018

State of Donation	Cause of Death	0-14	15-34	35-54	55+	Total
QLD	Intracranial Haemorrhage	0	1	11	15	**27**
	Traumatic Brain Injury	2	9	8	5	**24**
	Cerebral Infarct	0	0	2	2	**4**
	Cerebral Hypoxia / Ischaemia	3	17	14	2	**36**
	Other	0	1	2	0	**3**
	Total	**5**	**28**	**37**	**24**	**94**
NSW	Intracranial Haemorrhage	0	3	13	34	**50**
	Traumatic Brain Injury	1	4	5	11	**21**
	Cerebral Infarct	1	1	1	6	**9**
	Cerebral Hypoxia / Ischaemia	3	16	23	22	**64**
	Other	0	0	3	4	**7**
	Total	**5**	**24**	**45**	**77**	**151**
ACT	Intracranial Haemorrhage	0	2	2	2	**6**
	Traumatic Brain Injury	1	2	0	0	**3**
	Cerebral Infarct	0	0	2	2	**4**
	Cerebral Hypoxia / Ischaemia	0	4	1	1	**6**
	Other	0	0	2	0	**2**
	Total	**1**	**8**	**7**	**5**	**21**
VIC	Intracranial Haemorrhage	1	2	26	45	**74**
	Traumatic Brain Injury	1	10	6	9	**26**
	Cerebral Infarct	0	1	3	5	**9**
	Cerebral Hypoxia / Ischaemia	1	12	41	19	**73**
	Other	0	5	4	2	**11**
	Total	**3**	**30**	**80**	**80**	**193**
TAS	Intracranial Haemorrhage	0	1	1	5	**7**
	Traumatic Brain Injury	0	5	0	0	**5**
	Cerebral Infarct	0	0	1	0	**1**
	Cerebral Hypoxia / Ischaemia	0	0	0	1	**1**
	Other	0	0	0	0	**0**
	Total	**0**	**6**	**2**	**6**	**14**
SA	Intracranial Haemorrhage	0	0	8	11	**19**
	Traumatic Brain Injury	0	3	0	0	**3**
	Cerebral Infarct	0	1	4	0	**5**
	Cerebral Hypoxia / Ischaemia	0	5	3	0	**8**
	Other	0	0	1	0	**1**
	Total	**0**	**9**	**16**	**11**	**36**
NT	Intracranial Haemorrhage	0	0	1	0	**1**
	Traumatic Brain Injury	0	0	0	0	**0**
	Cerebral Infarct	0	0	0	0	**0**
	Cerebral Hypoxia / Ischaemia	0	1	1	1	**3**
	Other	0	0	0	0	**0**
	Total	**0**	**1**	**2**	**1**	**4**
WA	Intracranial Haemorrhage	0	0	6	9	**15**
	Traumatic Brain Injury	0	1	4	1	**6**
	Cerebral Infarct	0	0	1	0	**1**
	Cerebral Hypoxia / Ischaemia	2	5	8	2	**17**
	Other	0	0	1	1	**2**
	Total	**2**	**6**	**20**	**13**	**41**

Cardiopulmonary Resuscitation

Cardiopulmonary resuscitation is recorded, and includes the period leading up to the admission and during hospital stay for the patient prior to organ donation. Table 3.7 shows the number of recorded events of cardiopulmonary resuscitation for Australia and New Zealand donors from 2014 to 2018.

Table 3.7 Cardiopulmonary Resuscitation 2014 - 2018

	Australia					New Zealand				
	2014	**2015**	**2016**	**2017**	**2018**	**2014**	**2015**	**2016**	**2017**	**2018**
Yes	170	212	236	239	262	15	25	23	27	19
No	207	223	266	271	292	31	28	38	46	42
Unknown	1	0	1	0	0	0	0	0	0	1
Total	**378**	**435**	**503**	**510**	**554**	**46**	**53**	**61**	**73**	**62**

Table 3.8 Cardiopulmonary Resuscitation by Australian State 2018 (2017)

	QLD	**NSW**	**ACT**	**VIC**	**TAS**	**SA**	**NT**	**WA**
Yes	49 (46)	74 (64)	9 (7)	93 (61)	3 (6)	14 (19)	3 (2)	17 (34)
No	45 (59)	77 (71)	12 (7)	100 (87)	11 (13)	22 (13)	1 (1)	24 (20)
Unknown	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Total	**94 (105)**	**151 (135)**	**21 (14)**	**193 (148)**	**14 (19)**	**36 (32)**	**4 (3)**	**41 (54)**

Initial Mention of Organ Donation

In 2018, organ donation was predominantly raised by Intensive Care Clinicians and Donor Specialists; 43% of cases in Australia and 71% in New Zealand, as shown in Table 3.9. In Australia, organ donation was raised by a Donor Specialist on 144 (26%) occasions which is an increase from 15% in 2017. Organ donation in New Zealand was initially mentioned by a Donor Coordinator in 4 cases. In 2018, 28% of families raised the subject of organ donation in Australia, compared to 29% in 2017. In New Zealand, 18% of families raised donation in 2018 (8% in 2017).

Table 3.10 shows the category of person who initially mentioned organ donation for Australian states and territories in 2017 and 2018.

Table 3.9 Initial Mention of Organ Donation 2014 - 2018

	Australia					New Zealand				
	2014	**2015**	**2016**	**2017**	**2018**	**2014**	**2015**	**2016**	**2017**	**2018**
Donor Specialist	45	29	51	76	144	2	0	1	1	4
ICU Consultant	186	228	246	241	217	35	37	48	60	44
ICU Trainee (E.g. Registrar)	24	25	21	25	22	2	3	2	0	0
Social Worker	1	0	0	1	1	0	0	0	0	0
Emergency Clinician	9	8	7	9	10	0	0	0	0	0
Family	112	142	169	148	153	5	8	5	6	11
Nursing Staff	1	1	1	3	5	1	2	3	3	0
Other	0	2	8	7	2	1	3	2	3	3
TOTAL	**378**	**435**	**503**	**510**	**554**	**46**	**53**	**61**	**73**	**62**

Table 3.10 Initial Mention of Organ Donation by Australian State 2018 (2017)

	QLD	NSW	ACT	VIC	TAS	SA	NT	WA
Donor Specialist	9 (10)	29 (14)	4 (4)	91 (36)	5 (5)	4 (4)	0 (1)	2 (2)
ICU Consultant	45 (59)	70 (69)	8 (5)	42 (63)	3 (3)	27 (16)	3 (1)	19 (25)
ICU Trainee (E.g. Registrar)	3 (3)	8 (5)	1 (0)	8 (10)	0 (1)	1 (2)	0 (0)	1 (4)
Social Worker	0 (1)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Emergency Clinician	3 (1)	2 (4)	0 (0)	0 (2)	1 (1)	0 (0)	0 (0)	4 (1)
Family	33 (30)	39 (42)	8 (4)	50 (36)	5 (5)	4 (9)	1 (1)	13 (21)
Nursing Staff	1 (0)	1 (1)	0 (1)	2 (1)	0 (0)	0 (0)	0 (0)	1 (0)
Other	0 (1)	1 (0)	0 (0)	0 (0)	0 (4)	0 (1)	0 (0)	1 (1)
TOTAL	**94 (105)**	**151 (135)**	**21 (14)**	**193 (148)**	**14 (19)**	**36 (32)**	**4 (3)**	**41 (54)**

Donation Not Proceeding

An intended donor is a person for whom authority had been given, but organ donation did not proceed. A donation may not proceed due to positive virology tests, cardiac arrest or further investigations (for example, discovery of a cancer or infection). Donations after circulatory death may also not proceed if the time between withdrawal of support and cessation of circulation exceeded the limits set. This was the main reason donors did not proceed to organ donation in 2018.

Table 3.11 represents the number of non-proceeding DBD and DCD donors for each State/Territory and overall for Australia and New Zealand compared to the number of actual donors who did proceed to theatre for organ donation. In Australia, there were 162 donors who did not proceed down the pathway of solid organ donation, of which 49 (30%) were DBD and 111 (69%) were DCD and in New Zealand there 0 DCD intended donors and no DBD intended donors.

Table 3.11 Actual vs Intended (Non-Proceeding) Donors 2018

	DBD		DCD		Total	
	Actual	Intended	Actual	Intended	Actual	Intended
QLD	73 (81%)	17 (19%)	21 (66%)	11 (34%)	94 (77%)	28 (23%)
NSW	105 (89%)	13 (11%)	46 (71%)	19 (29%)	151 (83%)	32 (17%)
ACT	15 (94%)	1 (6%)	6 (55%)	5 (45%)	21 (78%)	6 (22%)
VIC	130 (92%)	12 (8%)	63 (55%)	52 (45%)	193 (75%)	64 (25%)
TAS	11 (92%)	1 (8%)	3 (75%)	1 (25%)	14 (88%)	2 (13%)
SA	26 (90%)	3 (10%)	10 (38%)	16 (62%)	36 (64%)	20 (36%)
NT	3 (100%)	-	1 (100%)	-	4 (100%)	-
WA	37 (95%)	2 (5%)	4 (36%)	7 (64%)	41 (80%)	10 (20%)
AUSTRALIA	**400 (89%)**	**49 (11%)**	**154 (58%)**	**111 (42%)**	**554 (77%)**	**162 (23%)**
NEW ZEALAND	**53 (100%)**	**-**	**9 (75%)**	**3 (25%)**	**62 (95%)**	**3 (5%)**

The reasons for donations not proceeding in Australia in 2018 are shown by donation pathway in Table 3.12.

Table 3.12 Reasons Why Donation Did Not Proceed 2018, Australia

Reason	Planned DBD	Planned DCD	Not Determined	Total
Planned Donation After Circulatory Death Who Died Outside Time Limit	0	64	0	64
Medical Contraindication Discovered During Consideration for Donation	34	24	0	58
No Suitable Recipients	10	11	1	22
Declined by Family After Initially Giving Consent	3	5	1	9
Failed Physiological Support	0	5	0	5
Improved Neurology	0	2	0	2
Refusal by Coroner / Pathologist	1	0	0	1
Did Not Progress to Brain Death	1	0	0	1
TOTAL	**49**	**111**	**2**	**162**

Donation After Circulatory Death

The majority of organs are donated by the Donation after Brain Death (DBD) pathway. After certification of brain death, the donor remains on the ventilator and the removal of organs occurs hours later. The Donation after Circulatory Death (DCD) pathway is defined by patients with irreversible cessation of circulation, typically after withdrawal of cardiopulmonary support in an intensive care setting. 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 1109 donors for Australia and 49 DCD donors for New Zealand.

In Australia, in 2018, there were 154 DCD donors and in New Zealand there were 9 DCD donors.

Table 3.13 shows the number of DCD Donors by jurisdiction for 2014 - 2018.

Table 3.13 Donation After Circulatory Death by Jurisdiction 2014 - 2018

Year	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ
2014	20	27	3	47	0	4	2	4	**107**	**6**
2015	19	40	4	47	0	5	0	5	**120**	**5**
2016	17	36	5	56	1	6	2	5	**128**	**6**
2017	34	32	7	62	2	7	0	7	**151**	**12**
2018	**21**	**46**	**6**	**63**	**3**	**10**	**1**	**4**	**154**	**9**

In 2018 in Australia, the mean age for a DCD donor was 47.7 years and the ages ranged from 3.2 to 73.6 years.

In New Zealand, the mean age of DCD was 52.6 years and the ages ranged from 21.1 to 61.0 years.

Causes of death leading to DCD in Australia in 2018 were intracranial haemorrhage (29), cerebral hypoxia/ischaemia (71), traumatic brain injury (26), cerebral infarct (11), other neurological conditions (3) and non-neurological conditions (14).

Causes of death leading to DCD in New Zealand in 2018 were intracranial haemorrhage (2), cerebral hypoxia/ischaemia (1), traumatic brain injury (3), cerebral infarct (1) and non-neurological conditions (2).

Time from Admission to Brain Death

In 2018, 22% of Australian donors were declared brain dead within 24 hours of hospital admission. 64% of donors were declared brain dead between 1 – 5 days of hospital admission. 13% of donors (53) were in hospital for more than 5 days before being declared brain dead.

In 2018, 1% of New Zealand donors were declared brain dead within 24 hours of hospital admission. 34% of donors were declared brain dead between 1 – 5 days of hospital admission. 55% of donors (29) were in hospital for more than 5 days before being declared brain dead.

Figure 3.1.1 - Time from Admission to Brain Death (hours) DBD Donors - Australia 2014-2018

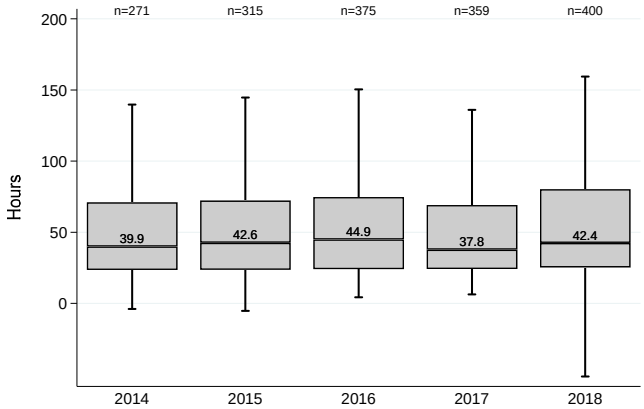
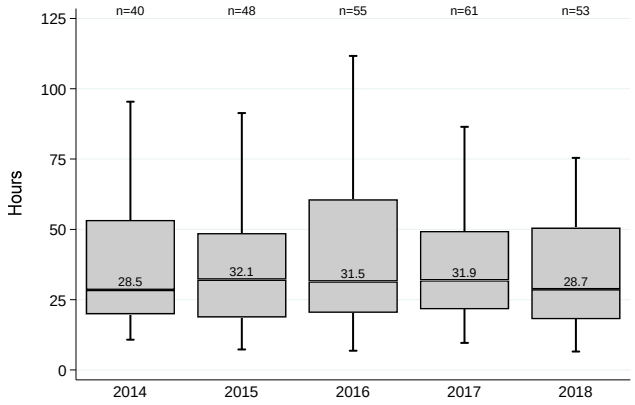


Figure 3.1.2 - Time from Admission to Brain Death (hours) DBD Donors - New Zealand 2014-2018

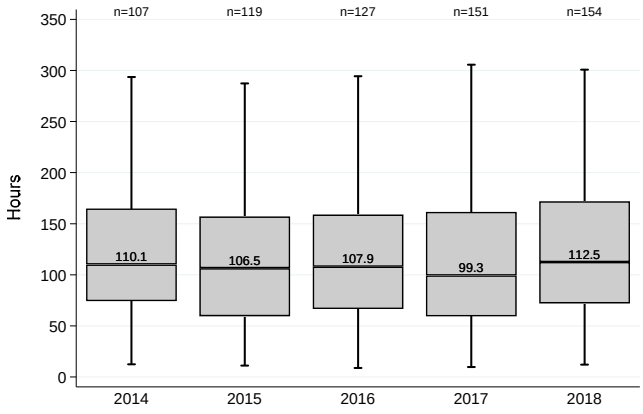


Time from Admission to Circulatory Death

As shown in Figure 3.2, in 2018, 3% of Australian DCD donors died within 24 hours of hospital admission. 55% of DCD donors died between 1 – 5 days of hospital admission. 42% of DCD donors (64) were in hospital for more than 5 days prior to death.

In New Zealand, 33% of DCD donors died between 1-5 days of hospital admission. 56% of DCD donors (5) were in hospital for more than five days prior to death.

Figure 3.2 - Time from Admission to Circulatory Death (hours) DCD Donors - Australia 2014-2018



Time from Ventilation to Brain Death

Figure 3.3 shows the time from commencement of ventilation to brain death in Australia and New Zealand for 2014-2018.

Figure 3.3.1 - Time from Ventilation to Brain Death (hours) DBD Donors - Australia 2014-2018

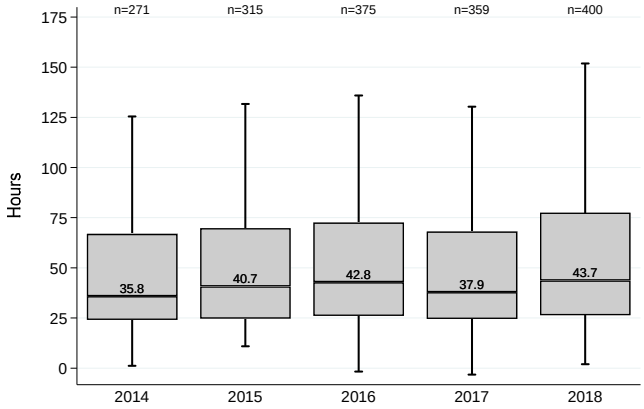
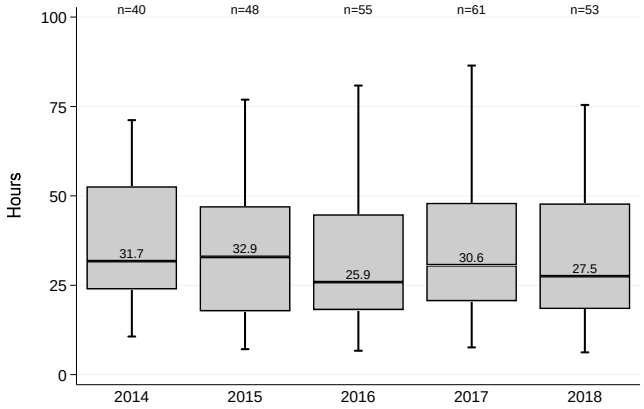


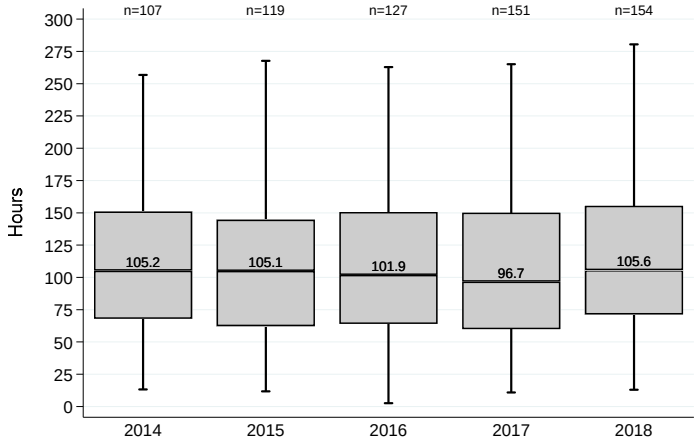
Figure 3.3.2 - Time from Ventilation to Brain Death (hours) DBD Donors - New Zealand 2014-2018



Time from Ventilation to Circulatory Death

Figure 3.4 shows the time from commencement of ventilation to circulatory death in Australia for 2014-2018. The median time in New Zealand in 2018 from ventilation to circulatory death was 149.1 hours.

Figure 3.4 - Time from Ventilation to Circulatory Death (hours) DCD Donors - Australia 2014-2018



Time from Brain Death to Donation

Figure 3.5 shows the time from ventilation to brain death in Australia and New Zealand for 2014-2018.

In 2018, 10% (41) of Australian DBD donors underwent aortic cross clamp within twelve hours of the certification of brain death. Cross clamp did not proceed in 4 Australian donors.

In 2018, 23% (12) of New Zealand DBD donors underwent aortic cross clamp within twelve hours of the certification of brain death. Cross clamp did not proceed in 1 New Zealand donors.

Figure 3.5.1 - Time from Brain Death to Donation (hours) DBD Donors - Australia 2014-2018

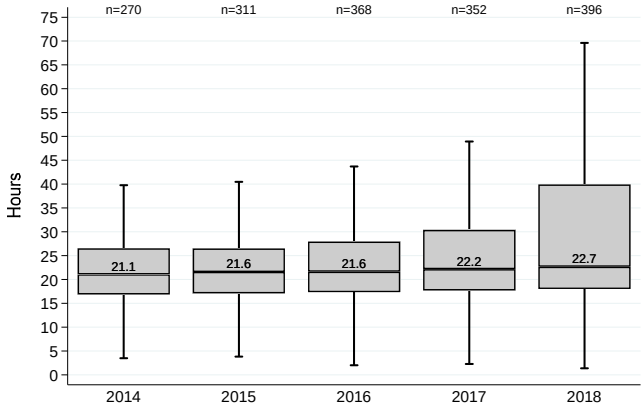
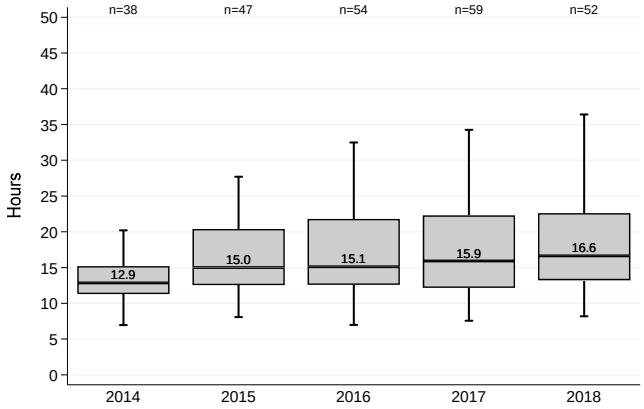


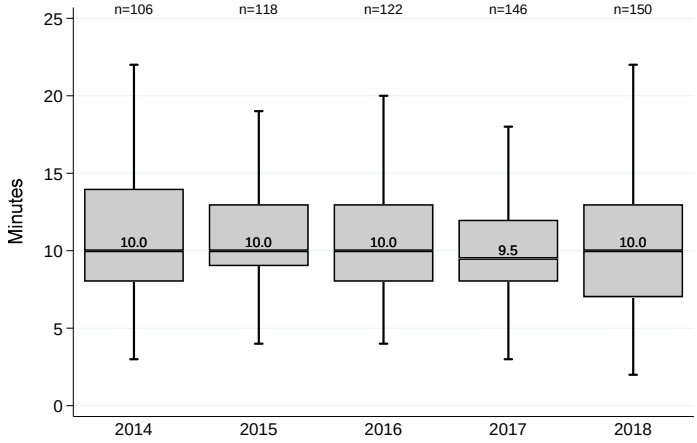
Figure 3.5.2 - Time from Brain Death to Donation (hours) DBD Donors - New Zealand 2014-2018



Time from Circulatory Death to Donation

As shown in Figure 3.6, in 2018, 55% (84) of Australian DCD donors underwent cold perfusion within ten minutes of the certification of circulatory death. Cold perfusion did not proceed in 4 Australian donors.

Figure 3.6 - Time from Circulatory Death to Donation (minutes) DCD Donors - Australia 2014-2018



In 2018, 56% (5) of New Zealand DCD donors underwent cold perfusion within ten minutes of the certification of circulatory death. Cold perfusion did not proceed for 1 New Zealand donor. The median time was 10 minutes.

Summary – Organs Requested, Consent Given, Retrieved and Transplanted

Table 3.14 shows the outcome of organs requested in 2018 (2017). The information on request for organ donation, refers only to those patients who become actual donors. The reasons for organs not requested, not retrieved or not transplanted are documented for each of the specific organs in their sections later in this report.

Table 3.14 Summary for Organ Donation Pathway by Organ Type 2018 (2017)

Country		Kidneys[1]	Liver	Heart	Lungs[1]	Pancreas	Intestines
AUSTRALIA	**Organs for donation**	1108 (1020)	554 (510)	554 (510)	1108 (1020)	554 (510)	554 (510)
	Organs Requested	1090 (989)	497 (459)	421 (387)	1008 (936)	443 (407)	267 (275)
	Organs Consented	1086 (987)	493 (453)	390 (358)	966 (910)	416 (393)	218 (242)
	Organs Retrieved	985 (894)	312 (271)	134 (109)	435 (421)	96 (95)	1 (1)
	Utilised organs for transplantation	922 (841)	297 (256)	129 (98)	420 (396)	52 (49)	1 (1)
	Recipients transplanted[2]	897 (832)	318 (281)	129 (98)	222 (206)	51 (49)	1 (1)
NEW ZEALAND	**Organs for donation**	124 (146)	62 (73)	62 (73)	124 (146)	62 (73)	62 (73)
	Organs Requested	122 (143)	61 (69)	42 (49)	110 (112)	44 (40)	0 (0)
	Organs Consented	122 (143)	61 (69)	41 (49)	110 (112)	43 (40)	0 (0)
	Organs Retrieved	104 (127)	46 (49)	20 (23)	56 (47)	8 (4)	0 (0)
	Utilised organs for transplantation	99 (121)	44 (48)	19 (23)	55 (44)	6 (4)	0 (0)
	Recipients transplanted[3]	98 (118)	49 (51)	19 (23)	28 (24)	6 (4)	0 (0)

[1] Kidneys and Lungs are counted as two separate organs (i.e. left and right).
[2] For Australia 2018 (2017), includes 25 (9) Double adult/Enbloc Kidneys, 42 (50) Split Livers, 6 (4) Reduced Size Livers, 24 (16) Single Lung and 198 (190) Double Lung Transplants.
[3] For New Zealand 2018 (2017), includes 1 (3) Double-adult/Enbloc Kidneys, 10 (6) Split Livers, 0 (3) Reduced Size Livers, 1 (4) Single Lung and 27 (20) Double Lung Transplants.

Multiple Organ Retrieval

For Australia, there were 554 actual deceased organ donors in 2018. Of those donors, 540 donors had at least one organ retrieved; and 531 resulted in at least one organ transplanted. There were 168 (30%) Australian donors in 2018 who had a single organ retrieved. Kidney only donation occurred in 136 cases, 20 donating a liver, 1 donating a heart and 11 donating lungs. In 2018, 372 (67%) donors had two or more organs retrieved for the purpose of transplantation. (Table 3.15)

Similarly, for New Zealand, there were 62 actual deceased organ donors in 2018. Of those donors, 60 had at least one organ retrieved; and 58 resulted in at least one organ transplanted. There were 16 (26%) single organ donors in 2018, 8 donating kidneys and 8 donating a liver. In 2018, 44 (71%) of donors had two or more organs retrieved for the purpose of transplantation. (Table 3.15)

Table 3.15 Multiple Organs Retrieved per donor 2014 - 2018

Organs Retrieved*	Australia					New Zealand				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
0	8 (2%)	8 (2%)	14 (3%)	15 (3%)	**14 (3%)**	3 (7%)	3 (6%)	2 (3%)	4 (5%)	**2 (3%)**
1	86 (23%)	118 (27%)	123 (24%)	155 (30%)	**168 (30%)**	12 (26%)	11 (21%)	13 (21%)	18 (25%)	**16 (26%)**
2	107 (28%)	114 (26%)	166 (33%)	141 (28%)	**161 (29%)**	8 (17%)	14 (26%)	25 (41%)	21 (29%)	**14 (23%)**
3	91 (24%)	95 (22%)	99 (20%)	116 (23%)	**107 (19%)**	12 (26%)	19 (36%)	13 (21%)	18 (25%)	**14 (23%)**
4	51 (13%)	62 (14%)	62 (12%)	60 (12%)	**67 (12%)**	10 (22%)	5 (9%)	6 (10%)	10 (14%)	**12 (19%)**
5	35 (9%)	37 (9%)	39 (8%)	23 (5%)	**36 (6%)**	1 (2%)	1 (2%)	2 (3%)	2 (3%)	**4 (6%)**
6	0 (0%)	1 (0%)	0 (0%)	0 (0%)	**1 (0%)**	0 (0%)	0 (0%)	0 (0%)	0 (0%)	**0 (0%)**

** The organ types retrieved from a donor are: Kidney, Liver, Lung, Heart, Pancreas and Intestine.*

Table 3.16 Multiple Organs Retrieved per Donor by Jurisdiction 2018

Organs Retrieved*	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ
0	2 (2%)	7 (5%)	1 (5%)	4 (2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	**14 (3%)**	**2 (3%)**
1	17 (18%)	54 (36%)	5 (24%)	66 (34%)	4 (29%)	11 (31%)	2 (50%)	9 (22%)	**168 (30%)**	**16 (26%)**
2	33 (35%)	39 (26%)	3 (14%)	55 (28%)	4 (29%)	11 (31%)	1 (25%)	15 (37%)	**161 (29%)**	**14 (23%)**
3	24 (26%)	28 (19%)	4 (19%)	33 (17%)	3 (21%)	9 (25%)	0 (0%)	6 (15%)	**107 (19%)**	**14 (23%)**
4	15 (16%)	13 (9%)	6 (29%)	19 (10%)	3 (21%)	3 (8%)	1 (25%)	7 (17%)	**67 (12%)**	**12 (19%)**
5	3 (3%)	10 (7%)	2 (10%)	15 (8%)	0 (0%)	2 (6%)	0 (0%)	4 (10%)	**36 (6%)**	**4 (6%)**
6	0 (0%)	0 (0%)	0 (0%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	**1 (0%)**	**0 (0%)**

** The organ types retrieved from a donor are: Kidney, Liver, Lung, Heart, Pancreas and Intestine.*