

ANZ
DATA



AUSTRALIA &
NEW ZEALAND
ORGAN DONATION
REGISTRY

SECTION 9

Deceased Donor Pancreas Donation

This section summarises pancreas donation activity from deceased donor in 2017, compared with previous years. Both countries reached their highest rate of pancreas transplants in 2017, with 2.0 pmp in Australia and 0.8 pmp in New Zealand.

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Suggested citation

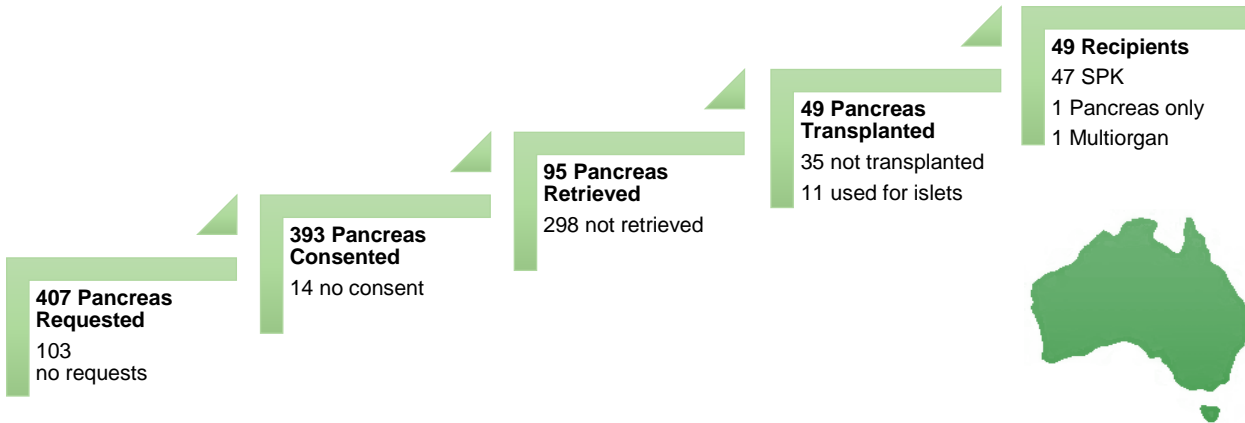
ANZOD Registry. 2018 Annual Report, Section 9: Deceased Donor Pancreas Donation. Australia and New Zealand Dialysis and Transplant Registry, Adelaide, Australia. 2018. Available at:
<http://www.anzdata.org.au>

Pancreas Donation

In Australia, there were 49 pancreas transplants in 2017. Forty-eight pancreas were transplanted simultaneously with another organ resulting in 47 simultaneous pancreas/kidney transplant recipients and one pancreas/liver/kidney/intestine transplant recipient. There was a rate of 2.0 per million population (pmp) pancreas transplants in 2017.

Figure 9.1 and 9.2 show the outcome of request for Pancreas donation from actual donors in 2017.

Figure 9.1 Outcomes of Request for Pancreas Donation from Actual Donors in Australia 2017

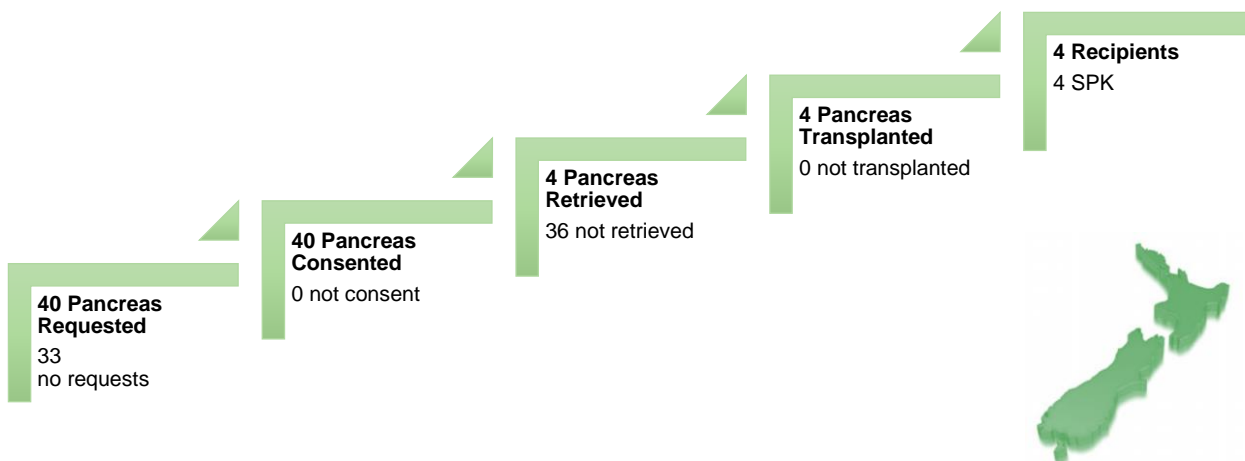


In New Zealand, there were four pancreas transplants (0.8 pmp) in 2017. All four transplants were a combined pancreas/kidney transplant.

The total number of pancreas transplant recipients (4) in 2017 compared to the previous year remains stable.

Figure 9.2 shows the outcomes of requests for pancreas donation, in New Zealand.

Figure 9.2 Outcomes of Request for Pancreas Donation from Actual Donors in New Zealand 2017



SPK = Simultaneous Pancreas Kidney transplant
 SPL = Simultaneous Pancreas Liver transplant

Figure 9.3 to 9.4 show the number of pancreas transplants by donation pathway and the number of pancreas recipients by jurisdiction.

Figure 9.3.1 - Recipients of Whole Pancreas Transplant by Donation Pathway, Australia 1998-2017

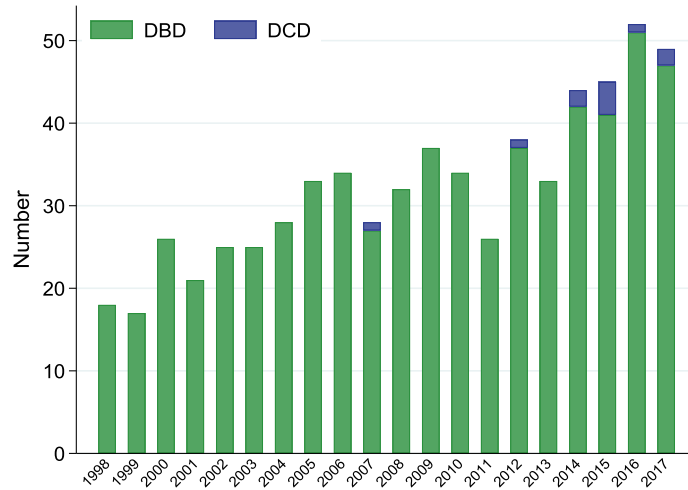


Figure 9.3.2 - Recipients of Whole Pancreas Transplant by Donation Pathway, New Zealand 1998-2017

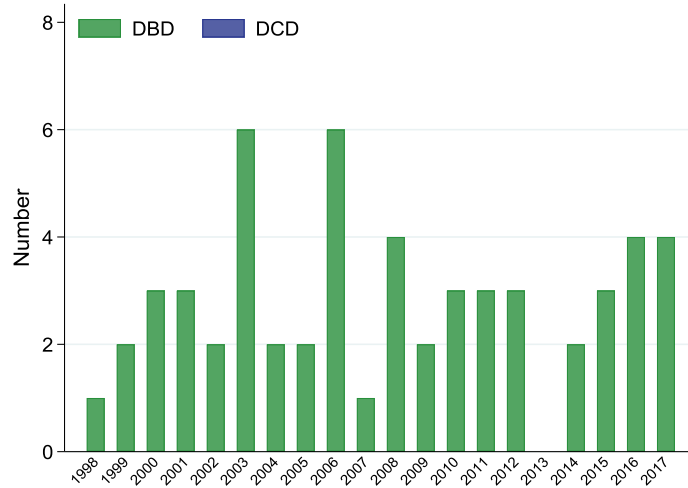
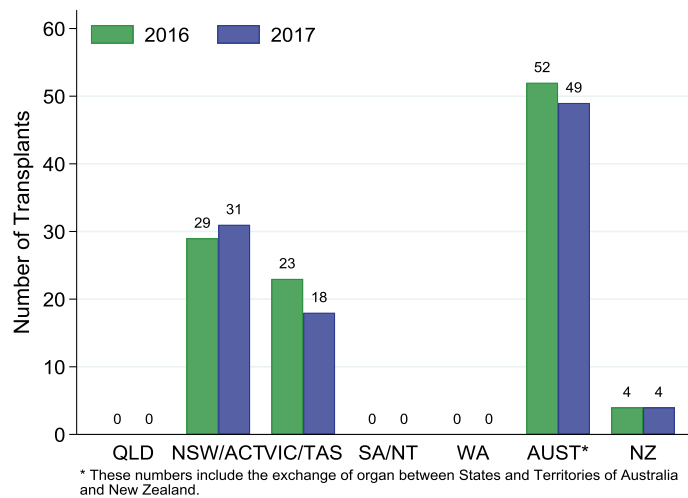


Figure 9.4 - Deceased Donor Pancreas Transplant Recipients* by Transplant State, Australia and New Zealand, 2016-2017



Age of Pancreas Donors

The age distribution of donors providing retrieved pancreas for Australia and New Zealand is shown in Figure 9.5.

Figure 9.5.1 - Age of Donors Providing Retrieved Pancreas Australia 2017

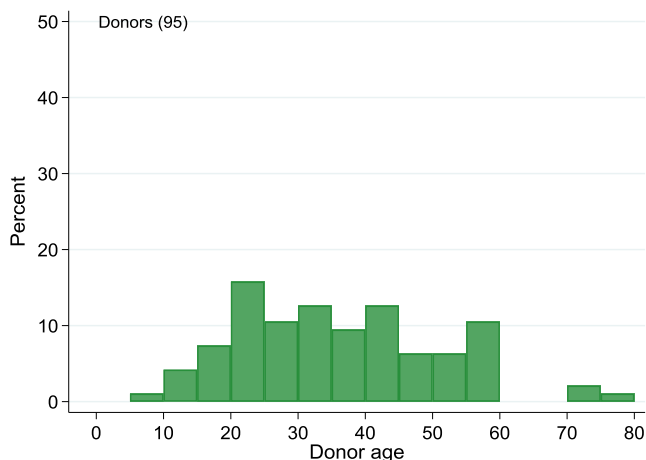
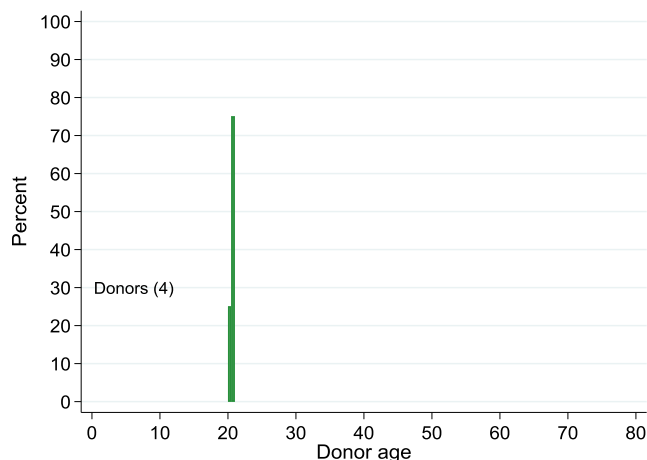


Figure 9.5.2 - Age of Donors Providing Retrieved Pancreas New Zealand 2017



Donor Pancreas Function

Tests for pancreas function of deceased donors include blood sugar levels, serum amylase and serum lipase tests.

Australia

In Australia, of the 426 donors in 2017 with a measurement taken, 84.0% had blood sugar levels greater than 8mmol/L. Of those 95 donors with pancreas retrieved, 87.4% had blood sugar levels greater than 8mmol/L.

Of the 330 donors with a measurement taken, 87.6% had normal amylase levels or lipase less than 80 U/L. Of the 88 donors with pancreas retrieved and a measurement taken, 95.5% had normal amylase levels or lipase less than 80 U/L.

New Zealand

In New Zealand, of the 4 donors in 2017 with pancreas retrieved, 75.0% had blood sugar levels greater than 8mmol/L.

Of the 3 donors in 2017 with pancreas retrieved and a measurement taken, 100.0% had normal amylase levels or lipase less than 80 U/L.

Pancreas Not Retrieved

In 2017, there were 298 pancreas not retrieved from Australian donors and 36 not retrieved from New Zealand donors.

For Australia, the main reason was due to the pancreas not being medically suitable (120), followed by the age of the donor (87). In New Zealand, there were 21 non-retrieved pancreas due to age of donor and 11 due to not being medically suitable.

Table 9.1 Reasons for Pancreas Not Retrieved 2017

Reason	Australia	New Zealand
Logistics	18	0
Not Medically Suitable	120	11
Surgically Unsuitable	11	0
Trauma to Organ	2	3
No Suitable Recipients	40	1
Age of Donor	87	21
DCD Donor	16	0
Consent Withdrawn	1	0
Others	3	0
Total	298	36

Pancreas Retrieved and Not Utilised for Transplantation

Table 9.2 tabulates the reasons pancreas were not used after retrieval for the purpose of transplantation since 2013.

Table 9.2 Reasons Pancreas Retrieved & Not Utilised for Transplantation, Australia (New Zealand) 2013 - 2017

Year	Logistics	Not Medically Suitable	Surgically Unsuitable	Trauma to Organ	No Suitable Recipients	Recipient Issue	Research	Insufficient Islets	Others	Total
2013	0 (0)	1 (0)	0 (0)	1 (0)	0 (0)	0 (0)	26 (0)	6 (0)	0 (0)	34 (0)
2014	0 (0)	2 (0)	1 (0)	0 (0)	0 (0)	0 (0)	38 (0)	6 (0)	0 (0)	47 (0)
2015	1 (0)	4 (0)	0 (0)	1 (0)	0 (0)	0 (0)	42 (0)	12 (0)	0 (0)	60 (0)
2016	1 (0)	2 (0)	0 (0)	1 (0)	0 (0)	0 (0)	48 (0)	7 (0)	1 (0)	60 (0)
2017	0 (0)	4 (0)	0 (0)	0 (0)	0 (0)	0 (0)	22 (0)	9 (0)	0 (0)	35 (0)

Figure 9.5 shows the non-utilisation rate of retrieved pancreas – the proportion of pancreas 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 pancreas being found to be medically or surgically unsuitable after retrieval).

Figure 9.5.1 - Non-utilisation Rate of Pancreas Retrieved for Organ Transplantation - Australia 2013-2017

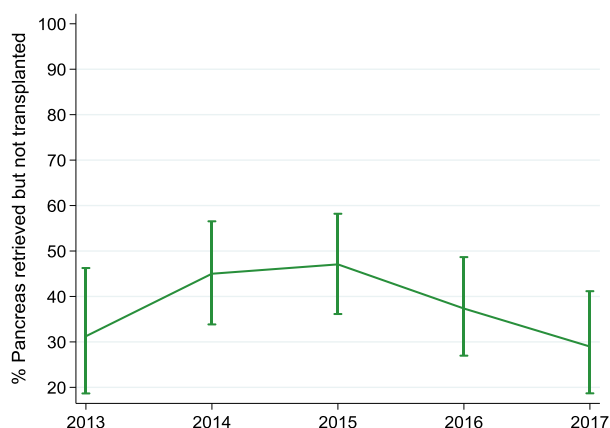
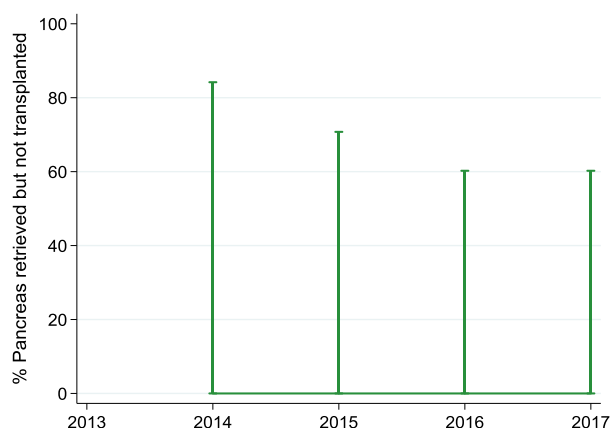


Figure 9.5.2 - Non-utilisation Rate of Pancreas Retrieved for Organ Transplantation - New Zealand 2013-2017



Outcome of Pancreas Donation

The outcome of pancreas donation activity in Australia and New Zealand throughout the donation pathway is shown in table 9.3.

Table 9.3.1 Outcome of Request for Pancreas Donation in Australia, 2013-2017

Outcome of Request	2013	2014	2015	2016	2017
Total Donors	391	378	435	503	510
Pancreas Requested for Donation	299	301	328	406	407
Pancreas Not Requested for Donation	92	77	107	97	103
Pancreas with Consent Given	289	285	314	394	393
Pancreas with Consent Not Given	10	16	14	12	14
Pancreas Retrieved	68	101	121	120	95
Pancreas Not Retrieved	221	184	193	274	298
Whole Pancreas Transplanted	33	44	45	52	49
Pancreas Only Transplanted	0	0	2	5	1
Pancreas Transplanted with Other Organ	33	44	43	47	48
Pancreas Islets Transplanted	1	10	16	8	11
Pancreas Not Used for Transplantation	34	47	60	60	35
Whole Pancreas Recipients	33	44	45	52	49
Pancreas Only Recipients	0	0	2	5	1
Pancreas with Other Organ Recipients	33	44	43	47	48
Pancreas Islets Recipients	1	10	15	8	11
Pancreas (including Islets) Non-utilisation Rate	50.00%	46.53%	49.59%	50.00%	36.84%
Pancreas (Whole, no Islets) Utilised Rate	48.53%	43.56%	37.19%	43.33%	51.58%

Table 9.3.2 Outcome of Request for Pancreas Donation in New Zealand, 2013-2017

Outcome of Request	2013	2014	2015	2016	2017
Total Donors	36	46	53	61	73
Pancreas Requested for Donation	12	22	39	45	40
Pancreas Not Requested for Donation	23	24	14	16	33
Pancreas with Consent Given	12	22	38	45	40
Pancreas with Consent Not Given	0	0	1	0	0
Pancreas Retrieved	0	2	3	4	4
Pancreas Not Retrieved	12	20	35	41	36
Whole Pancreas Transplanted	0	2	3	4	4
Pancreas Transplanted with Other Organ	0	2	3	4	4
Pancreas Islets Transplanted	0	0	0	0	0
Pancreas Not Used for Transplantation	0	0	0	0	0
Whole Pancreas Recipients	0	2	3	4	4
Pancreas with Other Organ Recipients	0	2	3	4	4
Pancreas Islets Recipients	0	0	0	0	0
Pancreas (including Islets) Non-utilisation Rate	-	0.00%	0.00%	0.00%	0.00%
Pancreas (Whole, no Islets) Utilised Rate	-	100.00%	100.00%	100.00%	100.00%