

## **CHAPTER 8**

# **TRANSPLANTATION**

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## TRANSPLANTS PERFORMED IN 2007

Figure 8.1

Number of Renal Transplant Operations (Live Donors)											
Year	Australia						New Zealand				
	1st	2nd	3rd	4th	5th	Total	1st	2nd	3rd	4th	Total
1963	5	1	0	0	0	6 (1)	0	0	0	0	0
1964	2	0	0	0	0	2 (0)	0	0	0	0	0
1965	12	1	1	0	0	14 (3)	1	0	0	0	1 (1)
1966	18	2	0	0	0	20 (5)	10	3	0	0	13 (0)
1967	69	2	0	0	0	71 (2)	18	4	1	0	23 (1)
1968	97	10	0	0	0	107 (0)	17	4	0	0	21 (2)
1969	149	12	0	0	0	161 (0)	39	5	0	0	44 (0)
1970	168	12	2	0	0	182 (1)	21	3	1	0	25 (0)
1971	207	22	1	0	0	230 (1)	26	6	0	0	32 (1)
1972	183	16	0	0	0	199 (2)	43	8	0	0	51 (1)
1973	213	30	1	0	0	244 (7)	50	10	2	0	62 (0)
1974	224	35	4	0	0	263 (6)	35	5	1	0	41 (3)
1975	271	29	3	1	0	304 (7)	61	13	0	0	74 (2)
1976	223	41	4	0	0	268 (10)	38	13	1	0	52 (1)
1977	265	57	4	0	0	326 (16)	46	10	2	0	58 (4)
1978	269	43	2	0	0	314 (17)	43	11	3	0	57 (11)
1979	293	35	5	0	0	333 (14)	61	13	3	2	79 (16)
1980	287	63	9	0	0	359 (36)	57	13	4	0	74 (18)
1981	306	58	9	1	0	374 (35)	51	8	1	0	60 (10)
1982	321	72	6	0	0	399 (53)	48	17	0	0	65 (8)
1983	272	63	10	2	0	347 (48)	69	25	4	0	98 (11)
1984	362	72	10	1	0	445 (48)	63	11	0	0	74 (16)
1985	318	79	17	1	0	415 (36)	60	25	3	0	88 (6)
1986	366	63	7	2	0	438 (32)	79	19	6	1	105 (13)
1987	310	58	21	3	0	392 (40)	57	17	4	1	79 (20)
1988	391	62	10	2	1	466 (46)	61	11	6	0	78 (8)
1989	433	46	10	2	0	491 (48)	71	11	1	0	83 (12)
1990	387	45	9	2	0	443 (59)	86	14	2	0	102 (23)
1991	386	70	11	3	0	470 (78)	62	10	4	1	77 (13)
1992	404	57	13	3	0	477 (70)	105	5	5	0	115 (17)
1993	385	63	6	4	1	459 (66)	69	13	2	0	84 (20)
1994	384	41	12	2	1	440 (103)	70	11	1	1	83 (20)
1995	371	60	11	0	0	442 (94)	84	7	3	0	94 (24)
1996	416	50	9	0	0	475 (115)	88	7	1	0	96 (26)
1997	444	51	6	1	0	505 (147)	101	10	1	0	112 (31)
1998	443	62	11	2	0	518 (161)	95	10	1	0	106 (31)
1999	403	43	9	0	0	455 (169)	97	11	4	0	112 (42)
2000	476	47	7	1	0	531 (181)	91	13	2	0	106 (31)
2001	488	45	6	2	0	541 (213)	101	9	0	0	110 (43)
2002	537	60	5	2	0	604 (230)	103	12	2	0	117 (48)
2003	472	60	10	1	0	543 (218)	94	13	4	0	111 (44)
2004	583	53	11	3	0	650 (244)	98	7	0	0	105 (48)
2005	539	67	15	2	0	623 (246)	87	5	0	1	93 (46)
2006	549	70	17	5	0	641 (273)	80	8	2	0	90 (49)
2007	527	75	11	0	2	615 (271)	112	9	2	0	123 (58)

### AUSTRALIA

The 615 transplant operations performed in 2007 represents a decrease of 4% compared to 2006 (641 operations) (Figure 8.1). This represents a transplant rate of 29 per million population per year, compared to 31 per million in 2006. There was a decrease of 1% for live donors from last year, (271 from 273) (Figure 8.2).

For more up to date figures on the deceased organ donor rate, see [www.anzdata.org.au/anzod/updates/anzodupdate.htm](http://www.anzdata.org.au/anzod/updates/anzodupdate.htm)

Live donor transplants accounted for 44% (271 grafts) in 2007, compared to 43% (273 grafts) in 2006 and 39% in 2005. This proportion continues to increase over time.

Primary recipients (those receiving a first transplant) received 86% of all kidneys transplanted in 2007, the same as in 2006.

### NEW ZEALAND

The number of transplant operations (123) performed in 2007 represents a transplant rate of 29 per million population per year (an increase of 37% from 2006) and the highest number ever recorded (Figure 8.1).

The percentage of live donors decreased from 54% to 47% of all operations in 2007 (Figure 8.3).

Of the grafts performed in 2007, 91% were to primary recipients, (89% in 2006).

Figure 8.2

#### Deceased and Live Donor Transplants Australia 2003 - 2007

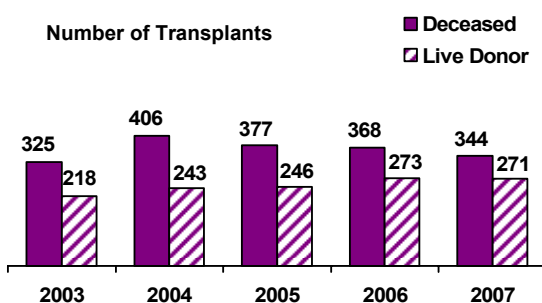
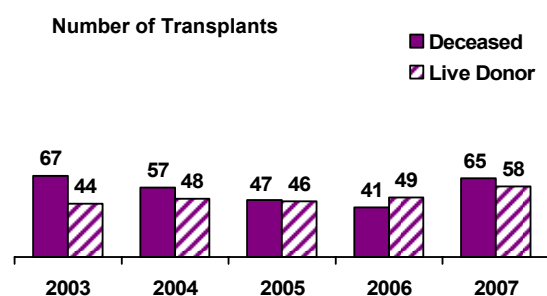


Figure 8.3

#### Deceased and Live Donor Transplants New Zealand 2003 - 2007

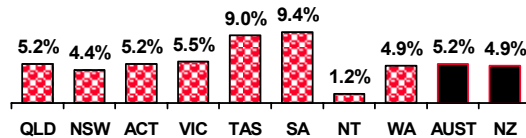


## TRANSPLANT RATE OF PATIENTS DIALYSED

**Figure 8.4**

**Ratio of Transplantation 2007 Related to Patients Dialysed\***

All Patients



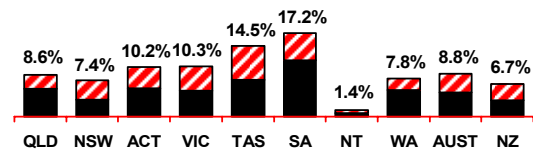
In Australia the proportion of patients receiving dialysis in 2007, who were transplanted that year was 5.2%, a decrease from 5.7% in 2006 and 6.0% in 2005. A further 65 patients with ESKD received pre-emptive transplantation (transplantation as the first RRT modality); thus transplantation was the mode of RRT for 615 of 11,729 (5.2%) of patients who would have otherwise been managed with dialysis in 2007.

**Figure 8.5**

**Ratio of Transplantation 2007 Related to Patients Dialysed\***

Patients - Age Group 15-64 Years

Live  
Deceased

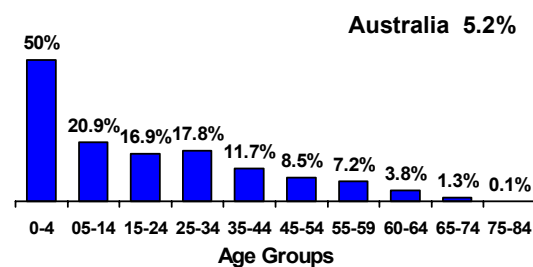


Of all patients in the 15-64 year age group who received dialysis treatment during 2007, 8.8% (556 patients) were transplanted in 2007, compared to 9.5% (578 patients) in 2006.

In New Zealand, 4.9% of all dialysed patients were transplanted in 2007, compared to 3.7% in 2006. A further 26 patients with ESKD received pre-emptive transplantation, thus transplantation was the mode of RRT for 123 of 2,489 (4.9%) of patients.

**Figure 8.6**

**Ratio of Transplantation 2007 Related to Patients Dialysed\***



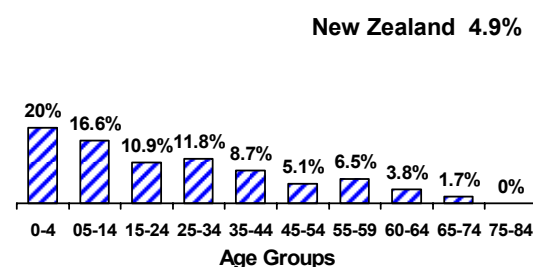
In the 15-64 year age group 6.7% of those on dialysis (111 patients) were transplanted in 2007, compared to 5.0% (80 patients) in 2006. (Figures 8.4 and 8.5).

The rate of transplantation in Australia was the highest in the age group 0-4 years (50%) and 5-14 years of age (20.9%) and continued to decline with increasing age (Figure 8.6).

As in Australia, the rate of transplantation for New Zealand patients was highest among those less than 14 years old and declined with age (Figure 8.7).

**Figure 8.7**

**Ratio of Transplantation 2007 Related to Patients Dialysed\***



\* Preemptive transplant patients included



## AGE OF RECIPIENTS TRANSPLANTED IN 2007

Figure 8.8

### Graft Number and Age of Patients Transplanted 2007

Donor Source	Graft No.	Age Groups									Total
		00-04	05-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	
<b>Australia</b>											
Deceased	1	1	3	10	29	66	76	79	21	2	<b>287</b>
	2	0	1	1	9	14	13	11	0	0	<b>49</b>
	3	0	0	0	2	2	1	1	0	0	<b>6</b>
	5	0	0	0	0	1	1	0	0	0	<b>2</b>
Live Donor	1	8	4	18	47	47	58	43	15	0	<b>240</b>
	2	0	1	2	6	4	7	4	2	0	<b>26</b>
	3	0	0	0	1	1	2	1	0	0	<b>5</b>
<b>Total</b>		<b>9</b>	<b>9</b>	<b>31</b>	<b>94</b>	<b>135</b>	<b>158</b>	<b>139</b>	<b>38</b>	<b>2</b>	<b>615</b>
<b>New Zealand</b>											
Deceased	1	0	0	3	10	7	11	18	9	0	<b>58</b>
	2	0	0	0	1	1	2	1	0	0	<b>5</b>
	3	0	0	0	0	2	0	0	0	0	<b>2</b>
Live Donor	1	1	2	4	6	13	11	16	1	0	<b>54</b>
	2	0	0	1	1	2	0	0	0	0	<b>4</b>
<b>Total</b>		<b>1</b>	<b>2</b>	<b>8</b>	<b>18</b>	<b>25</b>	<b>24</b>	<b>35</b>	<b>10</b>	<b>0</b>	<b>123</b>

### AUSTRALIA

The median age of transplant recipients in 2007 was 47.0 years, compared to 46.6 years in 2006. The age range was 1.4 to 77.6 years (Figures 8.8 and 8.9).

Forty eight percent of recipients were in the 35-54 year age group. Twenty nine percent of recipients in 2007 were over 54 years of age, the same as 2006.

The transplantation rate per million for each age group and as a percentage of dialysed patients for each age group is shown in Figures 8.6 and 8.9.

### NEW ZEALAND

The median age of transplant recipients in 2007 was 47.1 years similar to 47.2 years in 2006. The age range was 2.1 to 72.4 years (Figures 8.8 and 8.10).

Recipients aged between 35 and 54 years comprised 40% of the total. Thirty seven percent of recipients were over 54 years of age in 2007.

Figure 8.9

### Transplant Operations (Per Million) 2007

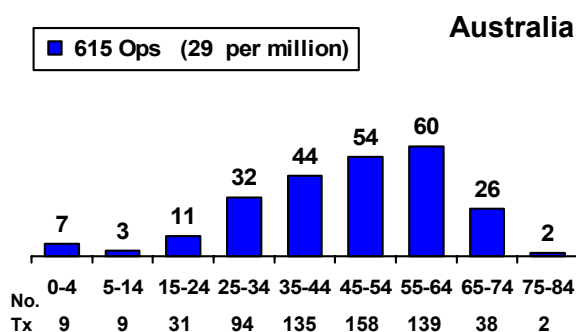
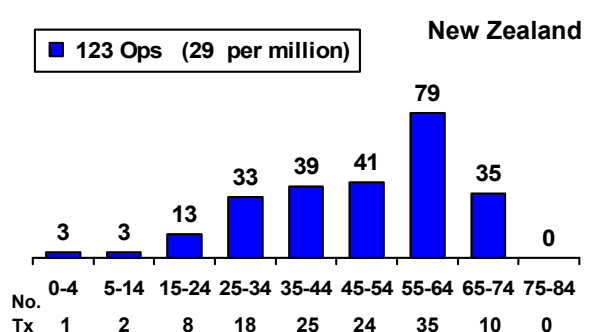


Figure 8.10

### Transplant Operations (Per Million) 2007



## ETHNICITY OF TRANSPLANT RECIPIENTS

### AUSTRALIA

Figures 8.11 and 8.13.

For the 15-59 year age group in 2007, 12.9% of dialysed Caucasoid patients were transplanted and 9.9% of Asians.

For Australian Aboriginals and Torres Strait Islanders (ATSI), the transplant rate was 1.9% compared to 2.9% in 2006 and 2.3% in 2005. In contrast, the number of ATSI patients dialysed continues to increase each year.

<b>Figure 8.11</b>									
<b>Australia</b>									
<b>Transplantation Rate - Age Group 15-59 years</b>									
<b>1997 - 2007</b>									
Year	Caucasoid			Aboriginal and Torres St. Islanders			All Patients		
	Dialysed	Tx	Rate	Dialysed	Tx	Rate	Dialysed	Tx	Rate
1997	2526	359	14.2%	440	20	4.5%	3363	429	12.7%
1998	2655	358	13.4%	479	25	5.2%	3555	436	12.2%
1999	2743	323	11.7%	515	19	3.7%	3696	386	10.4%
2000	2864	388	13.5%	541	17	3.1%	3882	441	11.3%
2001	2943	391	13.2%	600	20	3.3%	4049	457	11.2%
2002	2971	443	14.9%	636	16	2.5%	4144	511	12.3%
2003	3012	362	12.0%	682	12	1.7%	4267	421	9.8%
2004	3096	442	14.2%	743	25	3.3%	4448	528	11.8%
2005	3189	417	13.0%	801	19	2.3%	4623	499	10.8%
2006	3313	438	13.2%	848	25	2.9%	4846	527	10.9%
2007	3310	427	12.9%	888	17	1.9%	4932	505	10.2%

### NEW ZEALAND

Figures 8.12 and 8.13.

Amongst the 15-59 year age group, the proportion of Maori and Pacific People who received a renal transplant in 2007 was 3.0% and 1.8% respectively, compared with 14.6% for Caucasoid and 8.6% for Asian dialysis patients.

<b>Figure 8.12</b>												
<b>New Zealand</b>												
<b>Transplantation Rate - Age Group 15-59 years</b>												
<b>1997 - 2007</b>												
Year	Caucasoid			Maori			Pacific People			All Patients		
	Dialysed	Tx	Rate	Dialysed	Tx	Rate	Dialysed	Tx	Rate	Dialysed	Tx	Rate
1997	372	73	19.6%	279	9	3.2%	134	3	2.2%	829	91	10.9%
1998	372	60	16.1%	321	14	4.3%	151	7	4.6%	897	85	9.5%
1999	389	67	17.2%	318	16	5.0%	159	8	5.0%	928	98	10.5%
2000	401	68	17.0%	330	10	3.0%	184	4	2.1%	976	86	8.8%
2001	414	64	15.4%	360	13	3.6%	213	5	2.3%	1054	92	8.7%
2002	431	60	13.9%	383	11	2.8%	225	14	6.2%	1106	89	8.0%
2003	431	57	13.2%	407	15	3.6%	228	12	5.2%	1140	92	8.0%
2004	440	57	12.9%	422	9	2.1%	228	11	4.8%	1170	86	7.3%
2005	459	65	14.2%	425	3	0.7%	243	3	1.2%	1200	74	6.1%
2006	462	57	12.3%	468	8	1.7%	255	3	1.2%	1275	73	5.7%
2007	477	70	14.6%	484	15	3.0%	276	5	1.8%	1335	99	7.4%

### Figure 8.13

#### New Transplanted Patients 2003 - 2007 Related to Ethnicity

Race	2003	2004	2005	2006	2007
<b>Australia</b>	(543)	(650)	(623)	(641)	(615)
Caucasoid	472 (87%)	551 (85%)	527 (85%)	537 (84%)	524 (85%)
Aboriginal/Torres St. Islanders	13 (2%)	26 (4%)	22 (4%)	27 (4%)	18 (3%)
Asian	43 (8%)	57 (9%)	58 (9%)	59 (9%)	56 (9%)
Other	15 (3%)	16 (2%)	16 (2%)	18 (3%)	17 (3%)
<b>New Zealand</b>	(111)	(105)	(93)	(90)	(123)
Caucasoid	72 (65%)	72 (69%)	83 (89%)	65 (72%)	91 (74%)
Maori	16 (14%)	12 (11%)	3 (3%)	10 (11%)	17 (14%)
Pacific People	14 (13%)	12 (11%)	4 (4%)	7 (8%)	6 (5%)
Asian	9 (8%)	6 (6%)	3 (4%)	8 (9%)	9 (7%)
Other	-	3 (3%)	-	-	-



## AUSTRALIAN REGIONAL TRANSPLANTATION ACTIVITY 2007

**Figure 8.14**

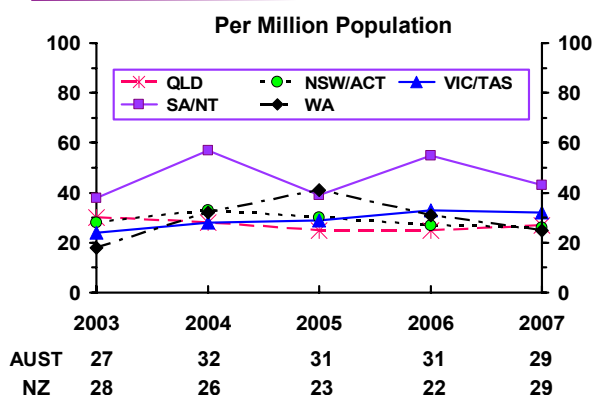
**Transplants in each Region 2003 - 2007**  
**Number of Operations**  
**(per Million Population per year)**

State	2003	2004	2005	2006	2007
Queensland	114 (30)	108 (28)	99 (25)	101 (25)	114 (27)
New South Wales / ACT *	198 (28)	230 (33)	212 (30)	195 (27)	187 (26)
Victoria / Tasmania *	129 (24)	151 (28)	162 (29)	185 (33)	183 (32)
South Australia / NT *	66 (38)	98 (57)	68 (39)	96 (55)	78 (43)
Western Australia	36 (18)	63 (32)	82 (41)	64 (31)	53 (25)
<b>Australia</b>	<b>543 (27)</b>	<b>650 (32)</b>	<b>623 (31)</b>	<b>641 (31)</b>	<b>615 (29)</b>

\* For calculation of population related totals, the populations of these States were summed

**Figure 8.15**

### Transplant Operations 2003 - 2007 Australian Transplant Regions



The rate of transplantation for each transplant region is shown in Figures 8.14 and 8.15.

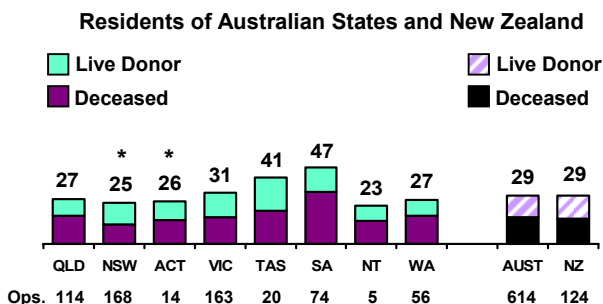
Transplants performed for people resident in Tasmania and the Northern Territory patients are included in figures for Victoria and South Australia respectively. These regions share common waiting lists and allocation protocols.

South Australia had the highest transplant rate (43 per million), followed by (32 per million) in the Victoria/Tasmania region in 2007.

The transplant rates for residents of each State and the Northern Territory is shown in Figure 8.16. The highest rate (47 per million) occurred in South Australia, followed by Tasmania (41 per million) and Victoria (31 per million). The lowest rate (23 per million) was in the Northern Territory.

**Figure 8.16**

### Rate of Transplantation 2007 Related to Population (Per Million)



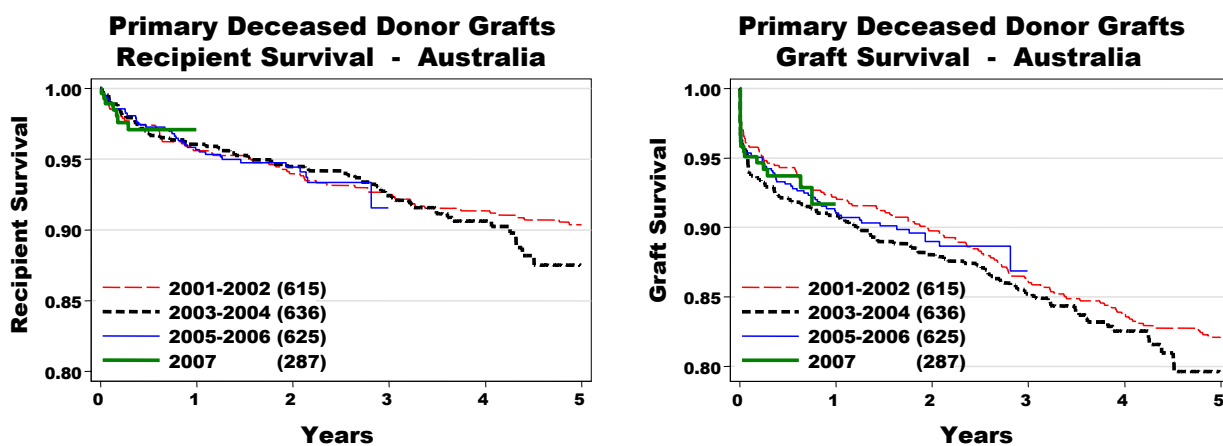
\* NSW population excludes residents of the Southern Area Health Service  
\* ACT population includes residents of the Southern Area Health Service  
Medical services in the ACT service the Southern Area Region

## TRANSPLANT SURVIVAL - PRIMARY DECEASED DONOR GRAFTS AUSTRALIA

Graft and patient survival for primary deceased donor grafts performed in Australia, calculated by the Kaplan-Meier method, is shown in Figure 8.17. The figures now include graft losses or deaths on the day of transplant. After initial improvement, unadjusted one year patient and graft survival for primary deceased donor grafts in Australia have stabilised in the past ten years. Kaplan-Meier graphs illustrating this are shown in Figure 8.18.

<b>Figure 8.17</b>					
<b>Primary Deceased Donor - Australia</b>					
<b>Recipient and Graft Survival 1991 - 2007</b>					
<b>% [95% Confidence Interval]</b>					
Year of Transplant	No. of Patients	Survival			
		1 month	6 months	1 year	5 years
<b>Recipient Survival</b>					
1991-1992	655	99 [98, 99]	95 [93, 96]	93 [91, 95]	84 [81, 87]
1993-1994	609	99 [97, 99]	96 [94, 97]	95 [93, 97]	85 [82, 88]
1995-1996	601	99 [98,100]	96 [94, 97]	95 [93, 97]	88 [85, 90]
1997-1998	606	99 [97, 99]	97 [95, 98]	96 [94, 97]	87 [84, 89]
1999-2000	559	99 [98,100]	97 [96, 98]	96 [94, 97]	87 [84, 90]
2001-2002	615	99 [98,100]	97 [96, 98]	96 [94, 97]	90 [87, 92]
2003-2004	636	99 [98,100]	97 [95, 98]	96 [94, 97]	-
2005-2006	625	99 [98,100]	97 [96, 98]	96 [94, 97]	-
2007	287	99 [97,100]	97 [94,99]	-	-
<b>Graft Survival</b>					
1991-1992	655	91 [89, 93]	87 [84, 89]	85 [82, 87]	72 [68,75]
1993-1994	609	93 [91, 95]	89 [86, 91]	88 [85, 90]	73 [69,76]
1995-1996	601	95 [92, 96]	90 [88, 92]	89 [86, 91]	78 [74, 81]
1997-1998	606	95 [93, 97]	92 [90, 94]	90 [88, 92]	77 [74, 80]
1999-2000	559	96 [95, 98]	93 [91, 95]	92 [89, 94]	80 [76, 83]
2001-2002	615	96 [94, 97]	94 [92, 96]	92 [90, 94]	82 [78, 85]
2003-2004	636	94 [92, 96]	92 [90, 94]	91 [88, 93]	-
2005-2006	625	95 [93, 97]	93 [91, 95]	91 [89, 93]	-
2007	287	95 [92, 97]	94 [90, 96]	-	-

**Figure 8.18**



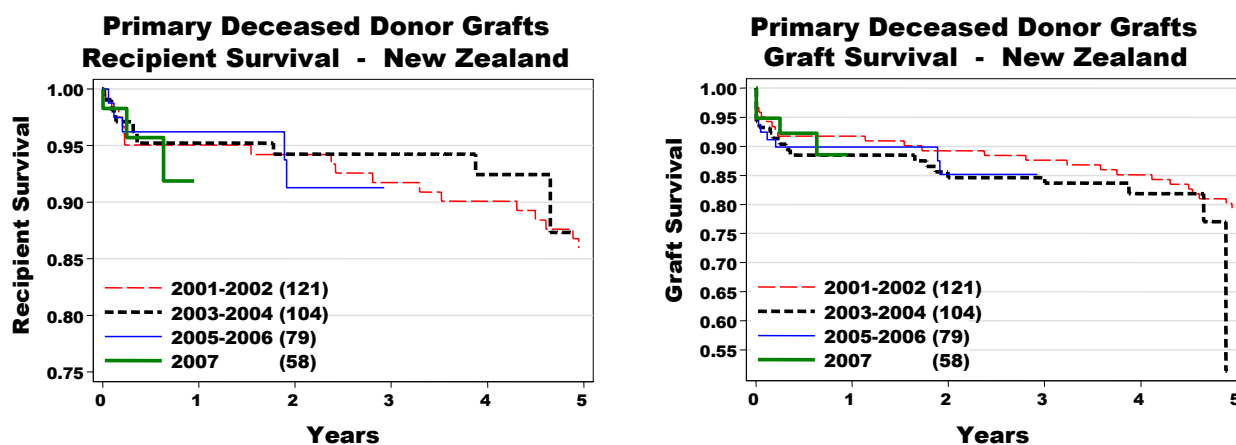


## TRANSPLANT SURVIVAL - PRIMARY DECEASED DONOR GRAFTS NEW ZEALAND

Graft and patient survival for primary deceased donor grafts performed in New Zealand, calculated by the Kaplan-Meier method, is shown in Figure 8.19. The figures now include graft losses or deaths on the day of transplant. Like Australia, the improvement in unadjusted one year patient and graft survival have stabilised in the past ten years. Tables illustrating this are shown in Figure 8.19. Figure 8.20 presents these as Kaplan-Meier curves.

<b>Figure 8.19</b>					
<b>Primary Deceased Donor - New Zealand Recipient and Graft Survival 1991 - 2007</b>					
<b>% [95% Confidence Interval]</b>					
Year of Transplant	No. of Patients	Survival			
		1 month	6 months	1 year	5 years
<b>Recipient Survival</b>					
1991-1992	140	99 [95, 100]	96 [91, 98]	94 [88, 97]	81 [74, 87]
1993-1994	103	96 [90, 99]	88 [80, 93]	85 [77, 91]	78 [68, 85]
1995-1996	126	98 [94, 100]	94 [88, 97]	93 [87, 96]	86 [78, 91]
1997-1998	139	99 [94, 100]	94 [88, 97]	94 [88, 97]	84 [77, 89]
1999-2000	122	97 [92, 99]	95 [89, 98]	93 [87, 97]	82 [74, 88]
2001-2002	121	99 [94, 100]	95 [89, 98]	95 [89, 98]	84 [75, 90]
2003-2004	104	99 [93, 100]	95 [89, 98]	95 [89, 98]	-
2005-2006	79	99 [91, 100]	96 [89, 99]	96 [89, 99]	-
2007	58	98 [88, 100]	96 [83, 99]	-	-
<b>Graft Survival</b>					
1991-1992	140	90 [84, 94]	83 [76, 88]	81 [73, 86]	69 [61, 76]
1993-1994	103	83 [73, 87]	78 [68, 85]	74 [64, 81]	59 [49, 68]
1995-1996	126	91 [85, 95]	88 [81, 93]	84 [76, 89]	72 [64, 79]
1997-1998	139	93 [87, 96]	87 [80, 92]	86 [79, 90]	73 [65, 80]
1999-2000	122	89 [82, 94]	87 [79, 92]	84 [76, 89]	72 [63, 79]
2001-2002	121	95 [89, 98]	92 [85, 95]	92 [85, 95]	77 [67, 84]
2003-2004	104	93 [86, 97]	88 [81, 93]	88 [81, 93]	-
2005-2006	79	92 [84, 97]	90 [81, 95]	90 [81, 95]	-
2007	58	95 [85, 98]	92 [80, 97]	-	-

Figure 8.20





## TRANSPLANT SURVIVAL - AUSTRALIA

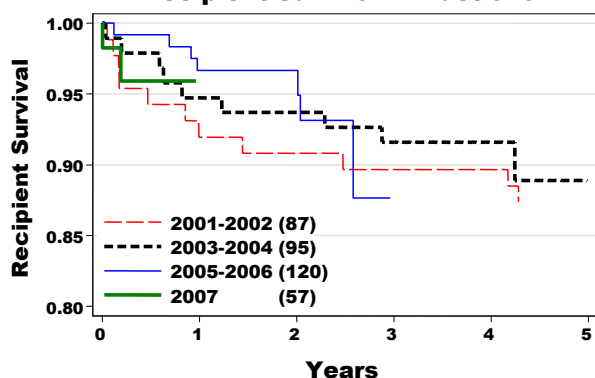
### SECOND AND SUBSEQUENT DECEASED DONOR GRAFTS

Patient and graft survival for second or subsequent deceased donor grafts in Australia, calculated by the Kaplan-Meier method, is shown in (Figure 8.21). The figures now include graft losses or deaths on the day of transplant. Kaplan-Meier graphs illustrating this are shown in Figure 8.22.

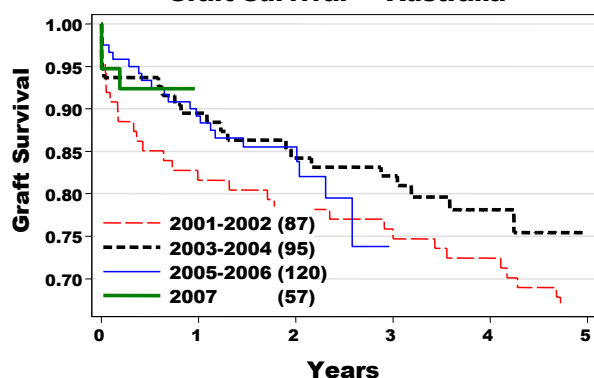
<b>Figure 8.21</b>					
<b>Second and Subsequent Deceased Donor - Australia</b>					
<b>Recipient and Graft Survival 1991 - 2007</b>					
<b>% [95% Confidence Interval]</b>					
Year of Transplant	No. of Patients	Survival			
		1 month	6 months	1 year	5 years
<b>Recipient Survival</b>					
1991-1992	144	100 [-, -]	97 [92, 99]	95 [90, 98]	85 [78, 90]
1993-1994	121	98 [94,100]	98 [93, 99]	94 [88, 97]	86 [78, 91]
1995-1996	107	99 [94,100]	97 [92, 99]	97 [92, 99]	86 [78, 91]
1997-1998	109	100 [-, -]	97 [92, 99]	95 [89, 98]	86 [78, 91]
1999-2000	77	99 [91,100]	96 [88, 99]	95 [87, 98]	86 [76, 92]
2001-2002	87	99 [92,100]	94 [87, 98]	92 [84, 96]	88 [79, 94]
2003-2004	95	99 [93,100]	98 [92, 99]	95 [88, 98]	-
2005-2006	120	100 [-,-]	99 [94,100]	97 [91, 99]	-
2007	57	98 [88, 100]	96 [84, 99]		
<b>Graft Survival</b>					
1991-1992	144	84 [77, 89]	79 [72, 85]	78 [70, 84]	63 [55, 70]
1993-1994	121	87 [79, 92]	85 [77, 90]	83 [76, 89]	70 [61, 78]
1995-1996	107	83 [75, 89]	78 [68, 84]	77 [67, 84]	61 [51, 69]
1997-1998	109	93 [86, 96]	89 [81, 94]	84 [76, 90]	73 [64, 81]
1999-2000	77	92 [83, 96]	88 [79, 94]	87 [77, 93]	68 [56, 77]
2001-2002	87	92 [84, 96]	85 [76, 91]	82 [72, 88]	70 [59, 78]
2003-2004	95	94 [86, 97]	94 [86, 97]	89 [81, 94]	-
2005-2006	120	97 [91, 99]	93 [87, 97]	89 [82, 94]	-
2007	57	95 [85, 98]	92 [81, 97]		

**Figure 8.22**

**Second and Subsequent Deceased Donor Grafts Recipient Survival - Australia**



**Second and Subsequent Deceased Donor Grafts Graft Survival - Australia**





## LIVE DONOR TRANSPLANTS

**Figure 8.23**

### Live Donor Operations as a Proportion (%) of Annual Transplantation 2002 - 2007

Recipient Age Groups	Year of Transplantation					
	2002	2003	2004	2005	2006	2007
00-04 years	80%	78%	100%	50%	100%	89%
05-14 years	50%	50%	59%	52%	55%	56%
15-24 years	54%	62%	64%	70%	71%	65%
25-34 years	56%	44%	40%	48%	48%	57%
35-44 years	31%	38%	39%	42%	37%	39%
45-54 years	30%	34%	35%	34%	37%	42%
55-64 years	33%	33%	28%	31%	40%	35%
65-74 years	30%	37%	31%	19%	41%	45%
75-84 years	0%	100%	0%	100%	0%	0%
<b>All Recipients</b>	<b>38%</b>	<b>40%</b>	<b>38%</b>	<b>39%</b>	<b>43%</b>	<b>44%</b>

### AUSTRALIA

There were 271 live donor (LD) kidney transplants performed in 2007 in Australia, representing 44% of all transplant operations. This proportion is the highest ever recorded (Figures 8.2 and 8.23).

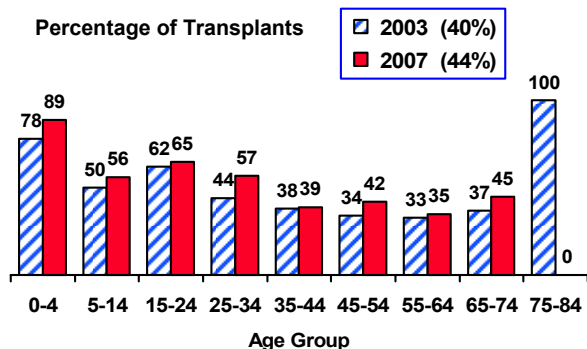
The overall number of live donor transplants was similar to 2006 (273 transplants).

Figure 8.24 shows the age-related proportion of live donor transplants for the years 2003 and 2007. The overall proportion of live donors increased in only two age groups, the 25-34 and 45-64 year age groups. There were 17 live donor recipients, 45% of all transplants in the 65-74 year age group.

The proportion of live donor transplants for each State and New Zealand for recipients aged 25-44 years is shown for the years 2000-2003 and 2004-2007 in Figure 8.25. There has been an increase in this age group for both countries for the years 2004-2007.

**Figure 8.24**

### Percentage Live Donor Grafts - Australia Stratified by Age Group 2003/2007



The proportion of genetically unrelated donors was 38% in 2007 compared to 40% in 2006. This was a decrease of 5.5% (six donors) from last year. Fifty two percent of live unrelated donors were spouses. The first paired kidney exchange donors were transplanted in 2007 in Western Australia. The number of related donors increased 2% (168 donors) from 164 donors in 2006 (Figure 8.30).

### NEW ZEALAND

The rate of live donor transplantation increased by 18% (58 donors) in New Zealand in 2007 as shown in Figure 8.29.

The genetically unrelated donor number remained similar to last year (22 donors) from 14 donors in 2005.

Forty seven percent of grafts were from a live donor (54% in 2006 and 49% in 2005). Unrelated donors represented 38% of all live donors in 2007. Spouses accounted for 59% and friends 27% of all unrelated donors. There was one non-directed donor in 2007 (Figure 8.30).

**Figure 8.25**

### Percentage Live Donor Grafts Regions: Australia and New Zealand

