

## More transplants – new lives









# Transplant Activity in the Republic of Ireland

### 2004-2005

This document has been produced by the Statistics and Audit Directorate. @ UK Transplant August 2005

**Cover pictures:** The launch of the 10th anniversary of the NHS Organ Donor Register at Trafalgar Square in October 2004. Skilled surgeons and their teams carry out thousands of transplants every year. Raising awareness plays a key role in increasing cornea transplants. In 2004-05 UK Transplant funded 25 living kidney donor programmes.

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#### PREFACE

This transplant activity report for financial year 2004-2005 relates throughout to the Republic of Ireland (RoI). All figures quoted are as reported to UK Transplant by 15 May 2005 for the National Transplant Database, maintained on behalf of the transplant community and the National Health Service (NHS). This report may not show the complete activity in the RoI, as only information provided to UK Transplant has been reported.

The information provided in the tables and graphs in Chapters 2-5 does not distinguish between adult and paediatric transplantation.

The definition of a solid organ donor is any donor from whom at least one solid organ has been retrieved with the intention to transplant. Organs retrieved solely for research purposes have not been counted in this Activity Report. Organ donation has been recorded to reflect the number of organs retrieved. For example, if both lungs were retrieved, two lungs are recorded even if they were both used in one transplant. Similarly, if one liver is donated, one liver is recorded even if it results in two transplants. All pancreatic transplants refer to the whole organ.

Donation and transplant rates in this report are presented per million population (pmp). The population figure used throughout this report for the RoI is 3.8 million and is based on the 2001 estimate from the Central Statistics Office, Ireland. The number of heartbeating donors by hospital is detailed in **Appendix I**.

This report is available on the UK Transplant website: <u>http://www.uktransplant.org.uk/ukt/statistics/statistics.jsp</u>

#### **1 SUMMARY OF ACTIVITY**

In 2004-2005, 74 cadaveric donors enabled 171 patients in the RoI to receive a solid organ transplant. This was 21 transplants less than in the previous year, making it the lowest for five years. The number of donors was just seven less than in 2003-2004. The increased numbers of both donors and transplants that were seen last year have therefore been maintained. The cadaveric donor rate per million population in the RoI is 19.5, which compares very favourably with the figure of 12.7 in the UK.

The total number of patients on the active and suspended transplant lists at the end of the year fell by 21% from 264 to 208. This was mainly due to the decrease of 60 in the number of patients registered for a kidney transplant.

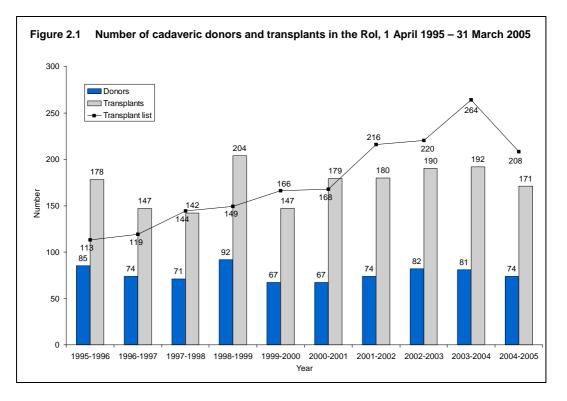
In renal transplantation, there were two more living donor kidney transplants and 21 fewer cadaveric donor transplants than last year. There were eight fewer donors of cardiothoracic organs and three fewer transplants in 2004-2005. Although the number of liver donors fell for the first time in four years to 65 donors, the number of transplants increased by five in 2004-2005. The number of patients on the liver transplant list at 31 March 2005, was 18 and is much the same as it has been for the last ten years.

Dave Collett Director of Statistics and Audit

#### 2 OVERVIEW

#### 2.1 Summary of activity

Cadaveric donor numbers, transplant activity and the number of patients on the active and suspended transplant lists at 31 March, for the period 1 April 1995 to 31 March 2005, are shown in **Figure 2.1**. There were less donors and transplants in 2004-2005 compared with the previous two years. There has been a fall in the number of patients on the transplant list for the first time in the last 10 years. Cardiothoracic transplant list information is not reported to UK Transplant.

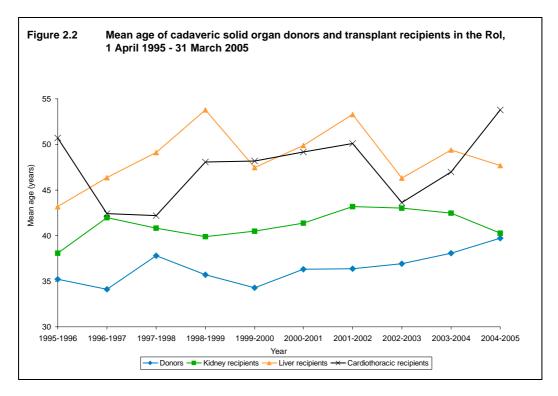


**Table 2.1** summarises the number of donors and transplants, by organ, for 2004-2005. There were 74 cadaveric heartbeating solid organ donors reported from the RoI in 2004-2005, seven less than the previous year. A total of 225 cadaveric solid organs were provided for transplant and 171 cadaveric transplants were performed in the RoI. Note that there were no non-heartbeating donors in 2004-2005.

	Kidney	Pancreas	Heart	Heart/ lung	Lung	Liver	TOTAL
Cadaveric donors	64	6	13	-	8	65	74
Cadaveric organs donated	127	6	13	-	14	65	225
Cadaveric transplants	119	6	8	0	0	45	171 <sup>1</sup>
Living donor transplants	3	0	0	0	0	0	3

The number of cadaveric transplants excludes those organs donated in the RoI that were subsequently transplanted in the UK or other European countries.

**Figure 2.2** shows the mean age of cadaveric solid organ donors and transplant recipients for the last ten years. The mean age of cadaveric donors has gradually increased over the last four years to a ten-year high of 39.7 years. The mean age of liver and cardiothoracic recipients in 2004-2005 was 47.7 and 53.8 years, respectively.



#### 2.2 Transplant list

A summary of the number of patients on the transplant list at 31 March 2005 is given in **Table 2.2** for each organ. At 31 March 2005, there were 208 patients registered on a solid organ transplant list in the RoI. Since 1992, all kidney patients registered have been formally suspended from the UK Transplant list as the RoI does not participate in the National Kidney Allocation Scheme. Therefore, on 31 March 2005, there were 182 patients on the suspended RoI kidney transplant list, including four kidney and pancreas patients. In addition, eight pancreas patients were temporarily suspended for other reasons.

Table 2.2Transplant list summary for the RoI at 31 March 2005									
	Kidney	Pancreas	Liver	TOTAL					
Active list Temporarily suspended	0 182 <sup>1</sup>	0 12 <sup>1</sup>	18 0	18 190					
TOTAL	<b>182</b> <sup>1</sup>	<b>12</b> <sup>1</sup>	18	208					
<sup>1</sup> Includes 4 kidney and pan	creas patient	5							

**Table 2.3** shows the numbers of patients waiting for a transplant at 31 March 2004 and 2005. The total number fell by 56 patients (21%) to 208 by the end of March 2005. When comparing transplant lists at 31 March 2004 and 2005, the renal list decreased by 60 patients and the liver list rose by three patients.

Table 2.3Active and suspended transplant lists in the RoI at 31 March 2004 and 2005								
	2004	2005	% Change					
Renal patients	242	182	-25					
Kidney	237	178	-25					
Kidney & pancreas	5	4	-					
Pancreas patients	7	8	-					
Liver patients	15	18	+20					
ALL ORGANS	264	208	-21					
Percentage not reported when fewe	er than 10 patients in either y	rear						

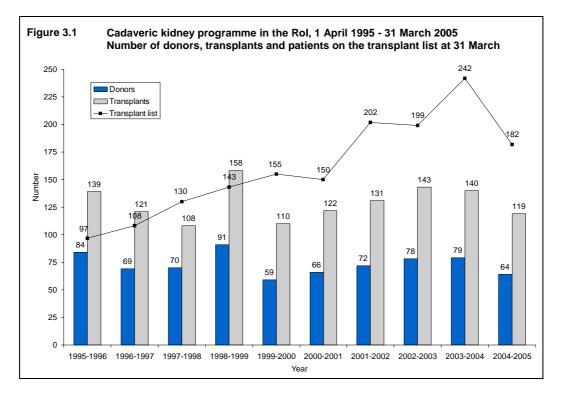
#### 2.3 Transplants

The numbers of transplants performed in the RoI in the last two years are given in **Table 2.4**. This table shows that a total of 174 transplants were performed in 2004-2005, 19 less than in the previous year. There were seven multi-organ transplants: six kidney and pancreas transplants and one kidney and liver transplant. The 112 cadaveric heartbeating kidney transplants in 2004-2005 include four en bloc transplants and one double kidney transplant.

Table 2.4Transplants performed in the RoI, 1 April 2003 - 31 March 2005							
Organ	2003-2004	2004-2005	% Change				
Cadaveric heartbeating kidney Living donor kidney	134 1	112 3	-16				
Cadaveric heart	11	8	-				
Cadaveric heartbeating liver	40	44	10				
Kidney & liver Kidney & pancreas	0 6	1 6	-				
Pancreas	1	0	-				
TOTAL TRANSPLANTS (Solid organs)	193	174	-10				
Total kidney transplants Total cardiothoracic transplants Total liver transplants	141 11 40	122 8 45	-13 - 13				
Percentage not reported when fewer than 10 t	ransplants in either year						

#### 3.1 Overview

A summary of activity for the cadaveric kidney programme is shown in **Figure 3.1**. This figure gives the number of donors, transplants and patients on the transplant list in the last ten years. The number of patients on the kidney transplant list fell in 2004-2005 to the lowest level in the last four years, and the number of donors and transplants are slightly lower than for the last couple of years.



The cadaveric donor kidney activity for 2004-2005 and 2003-2004 is summarised in **Table 3.1**. The donor rates per million population (pmp) are shown in parentheses.

Table 3.1Cadaveric kidney activity in the RoI, 1 April 2003 - 31 March 2005							
	2003-2004		2004-20	005			
Solid organ donors (pmp)	81 (2	21.3)	74	(19.5)			
Kidney donors (pmp)	79 (2	20.8)	64	(16.8)			
Kidneys retrieved	154		127				
Kidneys used	154		120				
Kidney transplants in ROI	140		119				
Kidney transplant list at 31 March	242		182				

Of the kidneys retrieved and used in 2004-2005, none were used in the UK compared with six in 2003-2004. There was one double kidney transplant in the RoI in 2004-2005 (five en bloc and 3 double kidney transplants in 2003-2004).

#### 3.2 Transplant list

The number of patients registered on the kidney or kidney and pancreas transplant list has decreased by 25%. On 31 March 2005, 182 patients were registered (178 for kidney and 4 for kidney and pancreas), compared with 242 on 31 March 2004; see **Table 3.1**. The number of patients waiting for a kidney transplant represents 47.9 patients pmp. An additional eight patients were registered for a pancreas only transplant. Of patients on the transplant list with a reported ethnicity, all were white.

The outcome of patients registered on the kidney transplant list at 1 April 2004 and subsequently registered during the financial year, is shown in **Table 3.2**. Overall, 79 (27%) of the 294 patients registered during 2004-2005 received a transplant by 31 March 2005.

		Suspended patients at 1 April 2004		strations -20051	TOTAL	
Outcome of patient						
at 31 March 2005	Ν	%	Ν	%	Ν	%
Remained suspended	132	55	50	89	182	62
Transplanted	73	31	6	11	79	27
Removed	19	8	0	0	19	6
Died	14	6	0	0	14	5
TOTAL	238		56		294	

#### 3.3 Donor and organ supply

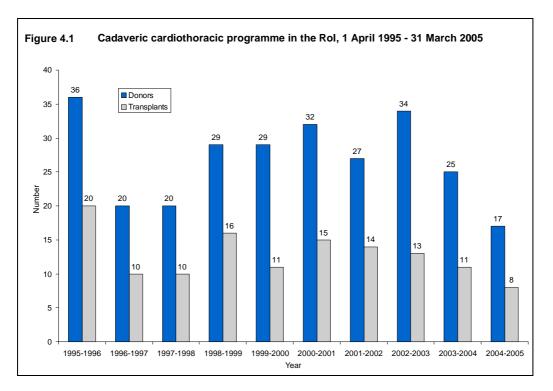
Of the 74 cadaveric heartbeating solid organ donors in the RoI in 2004-2005, 64 (86%) donated kidney(s), as shown in **Table 3.1**. From these donors, 127 kidneys were retrieved and 120 (94%) were transplanted. In 2004-2005, there were 14 donors who only donated kidney(s). All of the kidney donors were white.

#### 3.4 Transplants

There were 119 cadaveric heartbeating donor kidney transplants in 2004-2005, as shown in **Table 3.1**. Of these transplants, 4% were kidney and pancreas transplants. Of the kidney transplant recipients with reported ethnicity, all were white.

#### 4.1 Overview

**Figure 4.1** shows cadaveric cardiothoracic donor and transplant activity between 1 April 1995 and 31 March 2005. Transplant and donor numbers have fluctuated over this period. Cardiothoracic transplant list information is not reported to UK Transplant.



A summary of cadaveric cardiothoracic activity for 2003-2004 and 2004-2005 is shown in **Table 4.1** and includes donor rates per million population in parentheses.

organ activity in the RoI, 1	rgan activity in the RoI, 1 April 2003 - 31 March 2005					
2003-2004	2004-2005					
81 (21.3)	74 (19.5)					
25 (6.6)	17 (4.5)					
16	13					
23	14					
39	27					
16	13					
23	14					
39	27					
11	8					
11	8					
	2003-2004 81 (21.3) 25 (6.6) 16 23 39 16 23 39 11					

Of the hearts and lungs retrieved and used in 2004-2005, five hearts and 14 lungs were used in the UK. The corresponding figures for 2003-2004 were five hearts and 23 lungs.

#### 4.2 Donor and organ supply

Of the 74 solid organ donors in the RoI, 17 (23%) donated cardiothoracic organs in 2004-2005 as shown in **Table 4.1**. In the previous year, 25 (31%) of 81 solid organ donors provided cardiothoracic organs. The number of hearts retrieved fell by 19% and the number of lungs retrieved fell by 39%. All 17 cardiothoracic donors were of white ethnicity.

Cardiothoracic organ donors by retrieval centre, rather than geographical zone, in 2004-2005 are detailed in **Table 4.2**, with the corresponding figures for 2003-2004 in parentheses. Under current contracts, Newcastle retrieved organs from 53% of the RoI cardiothoracic donors. Of the 17 cardiothoracic donors, 53% donated only the heart.

Table 4.2Cadaveric cardiothoracic organ donors in the RoI, 1 April 2004 - 31 March 2005 (2003-2004), by retrieval centre								
Retrieval centre	Heart	only	<b>Type o</b> Heart		Lung(s	s) only	ΤΟ	ГAL
Dublin	7	(10)	1	(1)	0	(0)	8	(11)
Great Ormond Street	0	(1)	0	(0)	0	(0)	0	(1)
Newcastle	2	(1)	3	(3)	4	(9)	9	(13)
TOTAL	9	(12)	4	(4)	4	(9)	17	(25)

#### 4.3 Transplants

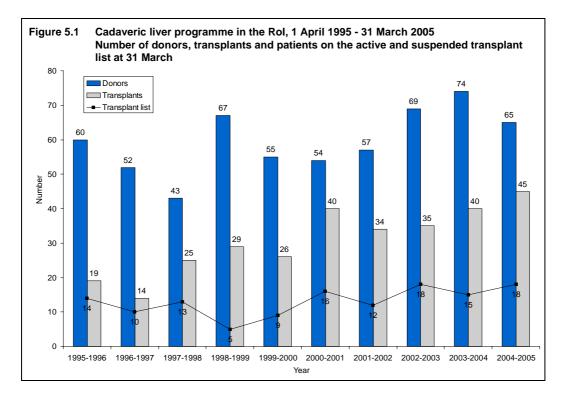
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Only cadaveric heart transplants have been carried out in the RoI in the last two years: 11 and 8 in 2003-2004, and 2004-2005, respectively. A lung transplant programme is in development, but during 2004-2005 no lung transplants were undertaken. All 8 cardiothoracic transplant recipients in 2004-2005 were of white ethnicity.

#### 5 LIVER ACTIVITY

#### 5.1 Overview

The number of cadaveric liver donors and transplants, and patients on the active and suspended transplant list for the last ten financial years is given in **Figure 5.1**. The number of liver transplants in 2004-2005 increased by five from the previous year to give the highest number in the past decade.



The cadaveric liver activity for 2004-2005 and 2003-2004, with donor rates per million population (pmp) in parentheses, are given in **Table 5.1**.

Table 5.1Cadaveric liver activity in the RoI, 1 April 2003 - 31 March 2005							
	2003-2004	2004-2005					
Solid organ donors (pmp)	81 (21.3)	74 (19.5)					
Liver donors (pmp)	74 (19.5)	65 (17.1)					
Livers retrieved	74	65					
Livers used	73	61					
Liver transplants in RoI	40	45					
Liver transplant list at 31 March	15	18					

Of the livers retrieved and used in 2004-2005, 20 were used in the UK (41 in 2003-2004). Liver transplants in the RoI in 2004-2005 include four transplants using livers from the UK (eight in 2003-2004).

#### 5.2 Transplant list

In 2004-2005, the number of patients waiting for a transplant increased by 20% compared with 2003-2004. Of the 18 patients on the liver transplant list at 31 March 2005, all were white.

**Table 5.2** shows the outcome of patients registered on the liver transplant list at 1 April 2004 and subsequently registered during the year.

	Active suspen patien 1 April	ided ts at	New registrations in 2004-2005 <sup>1</sup>		TOTAL	
Outcome of patient	1					
at 31 March 2005	Ν	%	Ν	%	Ν	%
Remained active/suspended	0	0	21	32	21	27
Transplanted	6	43	37	57	43	54
Removed	8	57	2	3	10	13
Died	0	0	5	8	5	6
TOTAL	14		65		79	

Of the 79 patients waiting throughout the year, 43 (54%) had received a transplant by the end of March 2005, 21 (27%) were still waiting for a transplant and 15 (19%) had either died or been removed from the transplant list.

#### 5.3 Donor and organ supply

Of the 74 solid organ donors in 2004-2005, 65 (88%) were liver donors giving a retrieval rate of 17.1 livers pmp; see **Table 5.1**. Of the livers retrieved, 94% were transplanted in 2004-2005. In 2004-2005, of the 65 livers retrieved, 41 were transplanted in the RoI and 20 were exported and transplanted in the UK. All 65 liver donors had ethnicity reported as white.

#### 5.4 Transplants

All the 45 liver transplants performed in 2004-2005 used whole livers from cadaveric heartbeating donors. Of these, 41 used livers from RoI donors and four used livers imported from the UK. Of the 45 transplant recipients, 43 were of white ethnicity, one was Asian and one was black.

#### APPENDIX

The table overleaf provides details of the 74 cadaveric heartbeating solid organ donors reported in 2004-2005, by donating hospital. Corresponding figures for 2003-2004 are given in parentheses.

Donating hospital	All do	onors	Multi- dor		Kidney	Heart	Lung	Liver	Pancreas
Ballinasloe, Portiuncula Hospital	1	(2)	1	(1)	2	0	0	1	0
Castlebar, Mayo General Hospital	1	(2)	0	(2)	0	0	0	1	0
Cavan, Cavan General Hospital	0	(4)	0	(3)	0	0	0	0	0
Cork, Bantry County Hospital	1	(0)	1	(0)	2	0	2	1	0
Cork, Cork South Infirmary Victoria Hospital	1	(0)	0	(0)	2	0	0	0	0
Cork, Cork University Hospital	10	(8)	9	(8)	20	2	4	9	1
Drogheda, Our Lady of Lourdes Hospital	4	(1)	3	(0)	6	0	0	4	0
Dublin, Beaumont Hospital	20	(27)	17	(25)	35	2	2	18	2
Dublin, James Connolly Memorial Hospital	1	(2)	1	(1)	2	0	0	1	0
Dublin, Mater Misericordiae Hospital	1	(4)	0	(3)	2	0	0	0	0
Dublin, St Colmcilles, Loughlinstown	2	(2)	0	(2)	0	0	0	2	0
Dublin, St James's Hospital	1	(5)	0	(5)	2	0	0	0	0
Dublin, St Vincent's Hospital (Elm Park)	1	(2)	1	(2)	2	0	0	1	0
Dublin, Tallaght Hospital	3	(1)	2	(1)	4	1	0	3	0
Dublin, The Children's Hospital	0	(2)	0	(2)	0	0	0	0	0
Ennis, Ennis General Hospital	0	(1)	0	(1)	0	0	0	0	0
Galway, University College Hospital	0	(3)	0	(3)	0	0	0	0	0
Kilkenny, St Luke's General Hospital	1	(0)	0	(0)	0	0	0	1	0
Letterkenny, Letterkenny General Hospital	0	(1)	0	(1)	0	0	0	0	0
Limerick, Limerick Regional Hospital	8	(5)	7	(5)	14	2	5	8	1
Limerick, St John's Hospital	0	(1)	0	(0)	0	0	0	0	0
Mullingar, Mullingar General Hospital	2	(2)	2	(2)	4	1	0	2	0
Naas, Naas General Hospital	2	(0)	2	(0)	4	0	0	2	0
Navan, Our Lady's Hospital	2	(1)	1	(1)	4	0	0	1	1
Nenagh, Nenagh General Hospital	1	(0)	1	(0)	2	0	1	1	0
Portlaoise, Portlaoise General Hospital	2	(0)	1	(0)	2	1	0	2	0
Sligo, Sligo General Hospital	1	(3)	1	(3)	2	0	0	1	1
Tralee, Tralee General Hospital	2	(1)	1	(1)	4	1	0	1	0
Tullamore, Count Hospital	2	(1)	2	(1)	4	1	0	2	0
Waterford, Waterford Regional Hospital	3	(0)	3	(0)	6	2	0	3	0
Wexford, General Hospital	1	(0)	0	(0)	2	0	0	0	0
ГОТАL	74	(81)	56	(73)	127	13	14	65	6



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