Australia and New Zealand Organ Donation Registry

(ANZOD Registry)

2010 Report

[Data collected to 31st December 2009]

Edited by

Mrs Leonie Excell
Ms Kathy Hee
Professor Graeme Russ

FUNDING

ANZOD Registry is funded by

Commonwealth Department of Health and Ageing Australian Organ and Tissue Authority Kidney Health Australia New Zealand Ministry of Health

COORDINATING CENTRE

ANZDATA Registry and ANZOD Registry, C/- The Royal Adelaide Hospital North Terrace, Adelaide, South Australia, 5000.

Prof G R Russ
A/Prof S P McDonald
Mrs L R Excell
Mr B E R Livingston
Ms Hannah Dent
Ms Christina Leitch
Ms Carol Young
Ms Kathy Hee
Editor / Chair, ANZDATA
Executive Officer / ANZDATA
Editor / Registry Manager ANZDATA
Information Manager ANZDATA
Administrative Officer ANZDATA
Administrative Assistant ANZDATA
Editor / ATCA Delegate for ANZOD

Phone (61-8) 8222.0941 Fax (61-8) 8222.0985 Email anzdata@anzdata.org.au Web http://www.anzdata.org.au

SUGGESTED CITATION

The suggested citation for this report is as follows:

ANZOD Registry Report 2010 Australia and New Zealand Organ Donation Registry Adelaide, South Australia.

Editors: Leonie Excell, Kathy Hee, Graeme Russ

Publications based upon ANZOD Registry information reported here or supplied upon request, must include the citation as noted above and the following notice:

The data reported here have been supplied by the Australia and New Zealand Organ Donation Registry. The interpretation and reporting of these data are the responsibility of the Authors and in no way should be seen as an official policy or interpretation of the Australia and New Zealand Organ Donation Registry.

DATABASE

Data is stored on a relational database using ORACLE version 9i.

STATISTICAL METHODS

Statistical analyses were performed using STATA version 11.

Printed in Adelaide, South Australia
© Copyright 2010 by the ANZOD Registry
ISSN 1329-2889

ACKNOWLEDGMENTS

The Editors would like to thank the Donor and Recipient Coordinators whose reporting of data has made this 2010 Report possible.

TRANSPLANT REGIONS AND CENTRES

QUEENSLAND

ORGAN DONOR COORDINATORS

Tina Coco Alana Cresswell Katharine Macleod Angela McInnes Francesca Rourke Bianca Topp

HEART AND LUNG TRANSPLANT CENTRE

Prince Charles Hospital, Rode Road, Chermside 4032

LIVER TRANSPLANT CENTRES

Princess Alexandra Hospital, Ipswich Road, Woolloongabba 4102 Royal Children's Hospital, Bowen Bridge Road, Herston 4029

RENAL TRANSPLANT CENTRE

Princess Alexandra Hospital, Ipswich Road, Woolloongabba 4102

NEW SOUTH WALES / AUSTRALIAN CAPITAL TERRITORY

ORGAN DONOR COORDINATORS

Carol Adams
Carrie Alvaro
Katy Coppin
Amy Davis
Leigh McKay
Candice Pattison
Nicola Seifert

HEART AND LUNG TRANSPLANT CENTRE

St Vincent's Hospital, Victoria Street, Darlinghurst 2010

AUSTRALIAN NATIONAL LIVER TRANSPLANT CENTRES

The Children's Hospital at Westmead, Hawkesbury Road, Westmead 2145 Royal Prince Alfred Hospital, Missenden Road, Camperdown 2050

NATIONAL PANCREAS TRANSPLANT CENTRE

Dept. Renal Medicine, Westmead Hospital, Cnr Hawkesbury and Darcy Road, Westmead 2145

RENAL TRANSPLANT CENTRES

The Children's Hospital at Westmead, Hainsworth Street, Westmead 2145
John Hunter Hospital, Lookout Road, New Lambton Heights, Newcastle 2305
Prince of Wales Hospital, Barker Street, Randwick 2031
Sydney Children's Hospital, High Street, Randwick 2031
Royal North Shore Hospital, Pacific Highway, St Leonards 2065
Statewide Renal Services (Royal Prince Alfred Hospital), Missenden Road, Camperdown 2050
St Vincent's Hospital, Victoria Street, Darlinghurst 2010
Westmead Hospital, Cnr Hawkesbury and Darcy Road, Westmead 2145

TRANSPLANT REGIONS AND CENTRES

VICTORIA / TASMANIA

ORGAN DONOR COORDINATORS

Samantha Brean
Bettina Clark
Bernie Dwyer
Espedito Faraone
Andrea Jordan
Nina Klein
Paula Lyons
Violet Marion
Claire Pollock
Jo Sanders
Elizabeth Treasure
Andrew Young

HEART AND LUNG TRANSPLANT CENTRES

Royal Children's Hospital, Flemington Road, Parkville 3052 The Alfred Hospital, Commercial Road, Prahran 3181

LIVER TRANSPLANT CENTRES

Austin Hospital, Austin Health,145 Studley Road, Heidelberg 3084 Royal Children's Hospital, Flemington Road, Parkville 3052

NATIONAL PANCREAS TRANSPLANT CENTRE (VICTORIA)

Monash Medical Centre, 246 Clayton Road, Clayton 3168

RENAL TRANSPLANT CENTRES

Alfred Hospital, Commercial Road, Prahran 3181
Austin Hospital, Austin Health, 145 Studley Road, Heidelberg 3084
Monash Medical Centre (Paediatric & Adult), 246 Clayton Road, Clayton 3168
Royal Children's Hospital, Flemington Road, Parkville 3052
The Royal Melbourne Hospital, Grattan Street, Parkville 3052
St Vincent's Hospital, 41 Victoria Parade, Fitzroy 3065

SOUTH AUSTRALIA / NORTHERN TERRITORY

ORGAN DONOR COORDINATORS

Kelly Anstey
Nerissa Brown (NT)
Renee Chambers
Kathryn Freeman
Catherine Hannan
Kathy Hee
Heylen Laver
James McCance
Stephen Orr
Nigel Palk
Kate Proudford (NT)
Lee Wood (NT)

SOUTH AUSTRALIAN LIVER TRANSPLANT CENTRE

Flinders Medical Centre, Flinders Drive, Bedford Park 5042

RENAL TRANSPLANT CENTRES

The Queen Elizabeth Hospital, 28 Woodville Road, Woodville 5011 Women's and Children's Hospital, 72 King William Road, North Adelaide 5006

TRANSPLANT REGIONS AND CENTRES

WESTERN AUSTRALIA

ORGAN DONOR COORDINATORS

Jane Dunbar

Susan Frew

Sarah Kelley

Micy Lewis

Mary Lynch

Denyse Norman

Melissa Smith

Linda Thomas

Daniel Winters

HEART TRANSPLANT CENTRE

Royal Perth Hospital, Wellington Street, Perth 6001

LUNG TRANSPLANT CENTRE

Royal Perth Hospital, Wellington Street, Perth 6001

WA LIVER TRANSPLANTATION CENTRE

Sir Charles Gairdner Hospital, Verdun Street, Nedlands WA 6009

RENAL TRANSPLANT CENTRES

Princess Margaret Hospital for Children, Roberts Road, Subiaco 6008 Royal Perth Hospital, Wellington Street, Perth 6001 Sir Charles Gairdner Hospital, Verdun Street, Nedlands 6009

NEW ZEALAND

ORGAN DONOR COORDINATORS

Rachel Josephson Janice Langlands Cecilia Westmacott

HEART AND LUNG TRANSPLANT CENTRE

Greenlane Clinical Centre, Greenlane, Auckland

NEW ZEALAND LIVER TRANSPLANT UNIT (NZLTU)

Level 15, Support Building, Auckland City Hospital, Auckland

PANCREAS TRANSPLANT CENTRE

Level 15, Support Building, Auckland City Hospital, Auckland

RENAL TRANSPLANT CENTRES

Auckland City Hospital, Grafton Road, Auckland (Starship Children's Hospital, Auckland) Christchurch Hospital, Riccarton Avenue, Christchurch Wellington Hospital, Riddiford Street, Newtown, Wellington

TABLE OF CONTENTS

INTRODUCTION							
SUMMARY							Page
Australia and New Zealand			•				. 1
ORGAN DONORS IN AUSTRALIA AND NEW ZEALAN							
Number and Donors per Million of Populati	on	•		•	•	•	. 2
International Donor Statistics .		•			•		. 2
Waiting List by Transplant Region 01-Jan-20							. 3
Transplanted Organs Donated in Australia ar							. 3
Number of Deceased Donors and Solid Orga	ın Trans	splants v	s the V	Vaiting I	ist 2004	4-2009	. 3
DONORS PER THOUSAND DEATHS 2004-2008.							. 4
DONOR POSTCODES							. 4
DONOR PROFILE IN AUSTRALIA AND NEW ZEALAN							. 5
Donor Gender - States, Australia and New Z	ealand	1995-19	999 200	00-2004	2005-2	009	. 5
Mean and Median Age by Gender - Australia	a, States	s and Ne	ew Zeala	and			. 6
Age Group of Deceased Donors .		•		•			. 7
CAUSE OF DONOR DEATH							. 8-11
DONOR OCCUPATION, ETHNIC ORIGIN AND RELIG	GIOUS I	DENOMI	NATION	١.			. 12
INTENDED DONORS							. 13
DONATION AFTER CARDIAC DEATH (DCD) DONOR	RS .						. 14-13
CARDIOPULMONARY RESUSCITATION .		•	•	•	•	•	. 16
DONOR WEIGHT	•	•	•	•	•	•	. 16
	•	•	•	•	•	•	. 10
VIROLOGY SCREENING							15
Cytomegalovirus Status of Donors .	•	•	•	•	•	•	. 17
Epstein-Barr Virus Status of Donors .	•	•	•	•	•	•	. 17
Hepatitis C Status of Donors .			·	•	•	•	. 17
Hepatitis B Core Antibody Status and Hepati	itis B Si	urtace A	Antigen.	•	٠	•	. 17-18
MEDICAL CONDITION OF DONORS		•	•	•	•		. 19
Expanded Criteria for Kidney Donors 2008-	-2009 St	tates, A	ustralia	and Nev	v Zealar	id.	. 20
DONOR INTENTION		_					
Driver's Licence and Enrolled in the Austral	ıan Org	an Don	or Regis	try.	•	•	. 20
AUTHORITY SOUGHT FOR ORGAN DONATION						•	. 21
DIRECT CONTACT WITH DONOR COORDINATOR					•	•	. 21
CORONER'S CASES							. 22
SUMMARY OF ORGANS REQUESTED, CONSENT GIVE	VEN, RE	ETRIEVE	ED AND	TRANSP	LANTEI		. 22
ORGANS REQUESTED							. 23
MULTIPLE ORGAN RETRIEVAL							. 23
ORGAN RECIPIENTS TRANSPLANTED	•	•	•	•	•	•	. 24
EXCHANGE OF ORGANS	•	•	•	•	•	•	. 27
Exchange of Organs between States and Nev	v Zaalaı	nd					. 25
Summary of Organs Transplanted in Austral			Paland F)onore	•	•	. 25
	ia mom	INCW ZC	zarana L	onors	•	•	. 23
KIDNEY DONATION Waiting List versus Deceased Donor Transpl	lanta						26
		•	•	•	•	•	. 26
Outcome of Request for Kidney Donation		•	•	•	•	•	. 26
Age of Donors Providing Transplanted Kidn		. N 7			•	•	. 27
Deceased Donor Kidney Transplants - Austr			earand	•	•	•	. 27
Regional Outcome of Requests for Kidney D	onation	1.		•	•	•	. 28
Donor Kidney Function	•	•	•	•	•	•	. 28
Reasons Kidneys were Unused	•	•	•	•	•	•	. 29
Donor Age of Unused Kidneys	•	•	•	•	•	•	. 29
Kidney Perfusion Method	•	•	•	•	•	•	. 30
Kidney Transplant Outcome	•	•	•	•	•	•	. 31
LIVER DONATION							
Waiting List versus Deceased Donor Transpl	lants						. 32
-							. 32
Age of Donors Providing Transplanted Liver							. 33
Liver Transplants by Transplant State and Co							. 33
- a . â							. 33
Regional Outcome of Requests for Liver Do			•		·		. 34
Reasons Livers were Unused after Retrieval							. 34
Donor Age of Unused Livers .				•			. 34
Donor Liver Function							. 35
Liver Transplant Outcome							. 35

TABLE OF CONTENTS

CARDIO-THORACIC ORGAN DONATION				
Waiting List versus Cadaver Transplants .				. 36
Outcome of Request for Heart Donation .				. 37
Age of Donors Providing Transplanted Hearts.				. 37
Heart Transplants by State and Country .				. 38
Heart and Lung Transplant Recipients by Transplant C				. 38
Regional Outcome of Requests for Heart Donation	o unitry		•	. 38
Heart Valve Donation and Age of Heart Valve Donors	,	•	•	. 39
Regional Outcome of Requests for Heart Valve Donat		•	•	. 39
-		•	•	
Outcome of Request for Lung Donation .	•	•	•	. 40
Age of Donors Providing Transplanted Lungs .	•	•		. 40
Lung Transplant Recipients	•	•	•	. 41
Regional Outcome of Requests for Lung Donation			•	. 41
Donor Lung Function				. 41
PANCREAS DONATION				
Waiting List versus Deceased Door Transplant				. 42
Outcome of Request for Pancreas Donation .	•	•	•	. 42
Age of Donors Providing Transplanted Pancreas and I	clote	•	•	. 43
		•	•	
Regional Outcome of Requests for Pancreas Donation		•	•	. 43
CORNEAL DONATION				
Outcome of Request for Cornea Donation and Age Co	rneal Do	onors		. 44
Regional Outcome of Requests for Corneal Donation.				. 44
BONE DONATION				
Outcome of Request for Bone Donation and Age of Bo	one Don	ors		. 45
Regional Outcome of Bone Donation		1013	•	. 45
_	•	•	•	. 43
TERMINAL MANAGEMENT				
Time from Admission to Brain Death	•		•	. 46
Time from Ventilation to Brain Death	•			. 47
Time from Brain Death to Aortic Cross Clamp.				. 47
DONOR MAINTENANCE				. 48
TERMINAL TREATMENT	•	•	•	. 49
TERMINAL TREATMENT	•	•	•	. 49
APPENDIX I AUSTRALIA (ON CD) (and website ww	w.anzd	ata.org	.au)	YELLOW PAGES
Donor Numbers for each State, Gender Numbers and Age Groups for				. 3-4
Number of Donors from each Hospital by State by Year 1989-2009				. 5-7
Cause of Donor Death in each State and Australia in detail 1989-2009	9	•		. 8-10
Cause of Donor Death related to Australian States 1989-2009				. 11
Cause of Donor Death in each State by Gender and Year 1989-2009				. 12-13
Organs Requested by Donor State				. 14
Reason Organs not Requested by Donor State				. 15-17
Organ Consent Obtained and not Obtained by Donor State				. 18-22
Solid Organs Retrieved by Donor State and Australia.				. 21-25
Reason Organs not Retrieved by Donor State				. 26-31
Organs Retrieved in Each Donor State by Retrieval State Team				. 32-33
Donor Age Related to Transplanted Organs				. 34-35
Outcome of Organs Retrieved in Australia				. 36-40
Transplanted Solid Organs by Transplanting State - Donated from Au-	stralia or	New Ze	aland	. 41
Transplanted Solid Organs - Donated from each State and Transplante	ed in Aus	tralia or	New Zeals	and 42-43
Transplanted Solid Organs from Donor States - Australian Donors 198	89-2009			. 44-45
Transplanted Solid Organs - Donor State to Destination State 1989-20	009			. 46-47
Transplanted Solid Organs - Donor State to Destination State 2009				. 48-49
Population by Age - Australian States and Territories .				. 50-51
Annual II Nove Tour (O. CD.)			,	~ -
APPENDIX II NEW ZEALAND (ON CD) (and website	www.ai	nzdata.	.org.au)	GREEN PAGES
Number of Donors from Each Hospital	•			. 2
Donor Gender Numbers and Age Groups	•			. 3
Cause of Donor Death Related to Gender and Age Group and by Year	r			. 4-5
Reason Organs not Requested	•			. 6
Organ Consents	•	•		. 7-8
Solid Organs Retrieved	•	•		. 8
Organs Retrieved in New Zealand by Retrieval State Team	•	•		. 9
Reason Organs not Retrieved		•	•	. 10-11
Donor Age Related to Transplanted Organs - Retrieved in New Zealar				12-13
Outcome of Organs Retrieved in New Zealand		•	•	
m 1 10 110 = 10 11 = 11				. 14
Transplanted Solid Organs - Donated from New Zealand or Australia		· ·		. 15
Transplanted Solid Organs - Donor State to Destination State 1993-20	009	·		. 15 . 16-17
Transplanted Solid Organs - Donor State to Destination State 1993-20 Transplanted Solid Organs - Donor State to Destination State 2009	009			. 15 . 16-17 . 18-19
Transplanted Solid Organs - Donor State to Destination State 1993-20 Transplanted Solid Organs - Donor State to Destination State 2009 Transplanted Solid Organs in New Zealand - Organs from New Zealand	009 nd or Au			. 15 . 16-17 . 18-19 20
Transplanted Solid Organs - Donor State to Destination State 1993-20 Transplanted Solid Organs - Donor State to Destination State 2009	009 nd or Au			. 15 . 16-17 . 18-19 20

INTRODUCTION

We are pleased to present the 2010 Report of the Australia and New Zealand Organ Donation Registry (ANZOD Registry). This report contains 2009 data as well as cumulative Australian data from the inception of the Registry in 1989 and New Zealand data since 1993.

The Registry is a collaborative effort of the Australasian Transplant Coordinators Association (ATCA Inc) and the Australia and New Zealand Dialysis and Transplant Registry (ANZDATA).

The Registry is grateful for the ongoing financial support provided through the Commonwealth Department of Health and Ageing, Kidney Health Australia and the New Zealand Ministry of Health. However, Commonwealth funding from July 2009 has come via the Australian Organ and Tissue Authority.

The staff employed by the ANZOD Registry are exceptionally dedicated and take great pride in their work. Mrs Lee Excell continues her work as the Registry and Database Manager and Mr Brian Livingston provides statistical programming and expertise.

We would like to thank Ms Kathy Hee, the Manager from the South Australian Organ Donation Agency (SAODA), as the ATCA co-editor of this Report.

The report can be accessed via our Internet Web Site http://www.anzdata.org.au.

Graeme Russ