



2015

Australia and New Zealand Organ Donation Registry



2015
ANZOD Registry
Annual Report

Data to 31-Dec-2014

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New Zealand Organ Donation Coordinators
Transplant Society of Australia and New Zealand
Australian National Organ Matching System
Australian and New Zealand Dialysis and Transplantation Registry
Australian and New Zealand Liver transplant Registry
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Printed in Adelaide, South Australia
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ISSN 1329-2889

**Funding:**

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

Suggested Citation:

The suggested citation for this report is as follows:

ANZOD Registry Report 2015
Australia and New Zealand Organ Donation Registry
Adelaide, South Australia. Editors K.L. Hurst, S.P. McDonald & G. Russ

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Acknowledgements

The Registry would like to thank the Donor and Recipient Coordinators whose reporting of data has made this 2015 report possible.

We would like to also acknowledge the ongoing financial commitment of the Australian Organ and Tissue Authority, the New Zealand Ministry of Health and Kidney Health Australia.

Forward



We are pleased to present the 2015 report of the Australia and New Zealand Organ Donation Registry (ANZOD Registry).

The Registry has been collecting and reporting on data for deceased organ donors since 1989 in Australia and 1993 in New Zealand. This report contains data for the year 2014 as well as cumulative data from each country since inception.

In 2014, with the implementation of the Electronic Donor Record by the Organ and Tissue Authority, the Registry received data for the first time in electronic format. Data was submitted by the DonateLife Network Donor Specialist Coordinators direct to the ANZOD Web based interface, enabling more timely data reporting on a monthly basis.

The eye and tissue sector continued to expand in 2014 with the collection of additional data elements strengthening the donation data to enable analysis on activities of eye and tissue transplantation.

Mr Leigh Adams joined the team in 2014 in the position of Senior Project Officer and continued to strengthen operations within the Registry.

The Registry continues to be a collaborative effort of the Australasian Transplant Coordinators Association and the Australia and New Zealand Dialysis and Transplant Registry (ANZDATA). The Registry gratefully receives funding from the Australian Organ and Tissue Donation Authority, Kidney Health Australia and the New Zealand Ministry of Health.

The report can be accessed via our website <http://www.anzdata.org.au>

Graeme Russ

Chair ANZOD Executive and Advisory Committee



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History of ANZOD



The Australian and New Zealand Dialysis and Transplant Registry (ANZDATA) records that the first deceased donor kidney transplant in Australia was performed (from a donor after cardiac death) in Melbourne in 1963. While systematic collection of information about transplant outcomes was established at the beginning of transplantation in Australia, there was no nation-wide collection of information about deceased organ donors until 1989.

By the mid 1980s, all states and territories had introduced near identical human tissue Acts which defined the legal criteria by which organs could be obtained from deceased and living persons as well as codifying both circulatory and neurological definitions of death. The legal criteria for brain death opened up the field of transplantation to organs and tissues other than kidneys and corneas: heart, liver, lung and kidney/pancreas transplants. With increasing awareness of transplant programs people were able to consider that donation of 'all organs and tissues' was possible in the event of their death and that numerous people could benefit should they do so. This now imposed a logistic challenge on transplant teams, often from different hospitals and in different states, to ensure that the organs were retrieved in a timely and coordinated way. In Australia co-ordination of kidney retrieval from deceased donors between 1963 and 1983 had been performed primarily by renal physicians and their reg-

istrars. The need for a central coordination contact/hub that could liaise with all organ transplant teams and the donor hospital intensive care unit became obvious. By 1983 the role of the organ donor co-ordinator was well established in the United Kingdom and the United States and Australia followed suit with a donor co-ordinator job description based on the UK model.

What is now known as the Australian and New Zealand Organ Donor Registry (ANZOD) was a joint initiative of ATCA and the ANZDATA Registry. At a 1989 ATCA meeting in Melbourne it was proposed that a database of all organ donors be established. Such a registry would provide demographic, clinical and organ distribution data on a national (and later international) scale.

Initially ATCA itself intended to establish the database but following a proposal from the Australian and New Zealand Dialysis and Transplant Registry (ANZDATA) a collaborative venture was undertaken – ATCA would provide the dataset and the data while ANZDATA would provide the data entry and analysis.

The ANZDATA Registry took on this task and the Australian and New Zealand Organ Donation (ANZOD) registry was commenced in 1989. Funding is provided by the Australia Organ and Tissue Donation and Transplantation Authority, the New Zealand Ministry of Health and Kidney Health Australia.

Data Collection Form



Updated January 2008

AUSTRALIA AND NEW ZEALAND ORGAN DONATION REGISTRY INSTRUCTIONS FOR COMPLETION OF DONOR SHEET

- DONOR NUMBER**
State prefix, then number (eg. Q00001, N00023, W00154, W00122)
Q=Queensland W=Western Australia
N=New South Wales/ACT Z=New Zealand
V=Victoria/Tasmania O=Other
S=South Australia/NT
- DONOR - ACTUAL OR INTENDED**
A=Actual
A person from whom the retrieval operation is commenced for the purpose of transplantation. This includes donors who may be deemed medically unsuitable at time of surgery or after removal of organs
B=Intended
A person from whom authority has been given or intended, but organ donation did not proceed. (eg positive virology, cardiac arrest, further investigations discovered cancer, infection etc)
Record reason in Section 20 or 35
- DONOR HOSPITAL AND STATE**
Code as per ANZDATA hospital list.
(eg RMBH3, POWH2, QEZB5, RLP7B)
If a hospital is not on the list, write on the sheet and the Registry will provide a code
Do not use code that is used by the tissue typing laboratory for allocation
- DATE OF BIRTH**
Two digits per box = DD.MM.YY (eg 03.04.80)
- POSTCODE**
Postal residential address of donor. Enter 9999 if overseas resident temporarily in Australia or NZ
- GENDER**
M=Male or F=Female
- HEIGHT**
Enter to nearest centimetre (eg 100.5 = 101)
If unknown enter X
- WEIGHT**
Enter to nearest kilogram (eg 80.6 = 81)
If unknown enter X
- RACIAL / ETHNIC ORIGIN**
10 = Caucasian
11 = Italian
12 = Greek
13 = Turk
20 = Aboriginal
30 = Chinese
40 = Maori
50 = Arab
80 = Pacific People
81 = Indonesian
82 = Malay
83 = Filipino
84 = Vietnamese
70 = Indian
99 = Other (Specify)
- RELIGION**
1 = Christian
2 = Muslim
3 = Buddhist
4 = Hindu
5 = Other (Specify)
6 = No religion
7 = Unknown
8 = Jewish

- OCCUPATION** Write in answer
- PRIMARY CAUSE OF DEATH**
11 = Motor Vehicle Accident
12 = Motor Bike Accident
13 = Cyclist
14 = Pedestrian
15 = Other Road Accident (Specify)
21 = Fall
22 = Other Accident (Specify)
23 = Gunshot
24 = Felony or Crime eg Assault (Specify)
31 = Spontaneous Subarachnoid Haemorrhage
32 = Other Spontaneous Intracranial Haemorrhage
33 = Cerebral Infarct
34 = Hypoxia (Specify)
35 = Cerebral Oedema (Specify)
40 = Cerebral Tumour (Specify benign or malignant)
If malignant-enter cancer sheet with details
50 = Drowning
51 = Sudden Infant Death Syndrome (SIDS)
52 = Asphyx
53 = Asphyx
60 = Other (Specify)
Y=Yes or N=No
- HEART BEATING** See Codes on form
- DIABETES** See Codes on form
- PAST HISTORY OF TREATED HYPERTENSION**
As documented in Medical Records and/or discussion with the Local Medical Officer
- SMOKING** See Codes on form
- PAST HISTORY OF CANCER**
Y=Yes N=No U=Unknown
If Yes, please enter the separate cancer form
- KEY EVENTS**
Admission to Hospital=Initial admission to hospital
When a patient is transferred record admission time
If exact time is unknown place X in box
Ventilation=Time of Intubation
Withdrawal (DCD)=Date and time of withdrawal
Record time of Second Brain Death Test and Cross Clamp of Aorta in Operating Theatre
If Brain Death NOT CERTIFIED (Donation After Cardiac Death (DCD)) record time of cardiac death and commencement of adequate cold perfusion
- LABORATORY RESULTS**
Blood Group A, A1, A2, B, AB, O
(Enter subtypes A1 or A2 if known)
Do not include Rhesus Factor
Tissue Typing
If unknown or not done place X in box
- HEPATITIS HBV sAg, HBV CORE ANTIBODY, HCV Ab, HCV NAT (Nucleic Acid), CMV IgG, EBV (Epstein Barr Virus), HIV Antibody, HIV NAT**
OTHER - Any other virology tests performed eg Toxoplasmosis (Specify test in section below box)
Enter 1=Positive 2=Negative 3=Not Done

- DONOR MAINTENANCE (POST BRAIN DEATH or PRE DCD)** No doses required
If maintenance drugs given post brain death certification Enter Y=Yes or N=No
Terminal = In Intensive Care Unit (ICU) (Immediately preceding retrieval)
Mean Arterial Blood Pressure (MAP) >50 mm Hg
Enter Y=Yes or N=No (If Yes, enter duration)
- TERMINAL TREATMENT**
Drugs given to the donor terminally
Enter Y=Yes or N=No
- KIDNEY DONOR** Enter Y=Yes or N=No in box
If not all information known, enter X in box
Admission = First available result
Terminal = In Intensive Care Unit (ICU) (Immediately preceding retrieval)
Creatinine Enter as 0.08 mmol/L
Urea Enter up to three digits eg 3.5, 12.5 mmol/L
- HEART BEATING** Urine Output = last hour in ICU preceding transfer to Operating Theatre
Oliguria In last 12 hours
If Yes - Enter Duration in Hours
- LIVER DONOR** Enter Y=Yes or N=No in box
Enter most recent donor values prior to retrieval
- HEART DONOR** Enter Y=Yes or N=No in box
ECG Normal Y=Yes or N=No
Echocardiogram Y=Yes or N=No
- LUNG DONOR** Enter Y=Yes or N=No in box
Bronchoscopy Y=Yes or N=No
Enter last arterial blood gas
Do not use gases taken to determine brain death
Chest Trauma Enter Y=Yes or N=No in box
1=Pneumothorax 2=Chest Drain 3=Other (Specify)
- PANCREAS DONOR** Enter Y=Yes or N=No in box
- ENROLLED WITH ORGAN DONOR REGISTRY**
Enter Y=Yes R=Not Registered
A=Not Accessed S=Not Applicable
- DRIVER'S LICENCE** See Codes
- AUTHORITY (Sought By Initially)**
1 = Donor Coordinator
2 = ICU Consultant
3 = ICU Trainee eg Registrar
4 = Social Worker
5 = Other (Specify)
9 = Unintended
7 = Nursing staff
- CONTACT WITH DONOR COORDINATOR**
See Codes
- CORONER'S CASE** See Codes

- AUTHORITY SOUGHT FOR**
Y=Yes or N=No (If No, specify reason)
1 = Disease of organ
2 = Trauma to organ
3 = Age of donor
4 = Prior family request
5 = Donor refusal
If authority obtained enter Y in box-If not enter N
Reason for N is not coded
- ORGANS RETRIEVED** Y=Yes or N=No
Complete only for organs where authority obtained (If not retrieved - enter reason)
10 = No suitable recipient
11 = Disease of organ
12 = Trauma to organ
13 = Cardiac arrest
14 = Infection
15 = Malignancy
16 = Hypotension
17 = Biochemistry not available
Y=Yes or N=No
18 = Isotopic support
19 = ECG
20 = ABG
21 = Chest Xray
22 = Logistics (Specify)
23 = Other (Specify)
24 = Age of donor
25 = Retrieval Team not available
- PRESERVATION (Solution in organ at storage)**
Record in order of solutions given
If two solutions used (eg Ross followed by UW)
Code Ross (20) in first column - then Code UW (70) in second column
10 = No washout (see slush only)
20 = Citrate solution (Ross)
31 = Eurocollins solution
32 = St. Thomas solution
33 = HTK
50 = Normal Saline
51 = Crystalloid cardioplegia
52 = Albumin based blood cardioplegia (pneumoplegia)
56 = Perfadex
57 = Celsior
60 = Other (specify)
70 = University Wisconsin (UW)
80 = Not applicable (cornea / bone)
90 = Hartman's solution
95 = PFC (Perfluorodecalin)-UW (Islets Storage)
- RETRIEVAL TEAM**
Code as per ANZDATA Hospital List. See Question 3
- DESTINATION**
Hospital and State -
Code as per ANZDATA hospital list. See Question 3
Enter Transplant Hospital NOT Caring Hospital
- OUTCOME** Enter Code
T = Transplanted
E = En bloc
D = Double Adult
R = Research
S = Stored (for bone, heart valves etc)
N = Not used (Specify reason in Surname section)
U = Unusable (Specify reason in Surname section)
- RECIPIENTS' SURNAME AND GIVEN NAMES**
IMPORTANT for all solid organs
Not essential for tissue recipients

**Database:**

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

Statistical Methods:

All statistical analyses were performed using STATA/IC version 14.0. StataCorp. 2015. Stata Statistical Software: Release 14. College Station, TX: StataCorp LP.

Data reported were obtained from the ANZOD 2014 database.

Australian population statistics were obtained from the Australian Bureau of Statistics, 3101.0 - Australia Demographic Statistics, Jun 2014, released 18 December 2014.

Southeast New South Wales population for local government areas obtained from the Australian Bureau of Statistics, 3235.0 - Population by Age and Sex, Regions of Australia, 2013, released 28 August 2014.

Australian death statistics were obtained from the Australian Bureau of Statistics, 3303.0 - Causes of Death, Australia, 2013, released 31 March 2015.

New Zealand death statistics were obtained from Statistics New Zealand, Births and Deaths: Year Ended December 2013.