

# ETHICAL ISSUES IN TRANSPLANTATION; WHAT IS THE STATUS OF DONATION AFTER CARDIO- CIRCULATORY DEATH IN ALBERTA?

Brendan Leier PhD  
Clinical Ethicist, UAH Stollery MHI  
Assistant Clinical Professor  
Dossetor Health Ethics Centre  
FOMD, University of Alberta

# A Very Quick Overview...

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- Types of transplant
  - Living donor (LR, LUR)
  - Cadaveric
    - NDD (brain dead)
    - DCD (cardio-circulatory death)

# Harvard Ad Hoc Committee 1968

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A definition of irreversible coma: report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death. JAMA 1968;205:337-40.

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- 1950: First successful kidney transplant by Dr. Richard H. Lawler ([Chicago](#), U.S.A.)<sup>[13]</sup>
- 1954: First living related kidney transplant ([identical twins](#)) (U.S.A.)<sup>[14]</sup>
- 1955: First [heart valve](#) allograft into descending [aorta](#) ([Canada](#))
- 1962: First kidney transplant from a deceased donor (U.S.A.)

# A Very Quick Overview...

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- 1965: [Australia](#)'s first successful (living) kidney transplant ([Queen Elizabeth Hospital, SA](#), Australia)
- 1966: First successful pancreas transplant by Richard Lillehei and William Kelly ([Minnesota](#), U.S.A.)
- 1967: First successful liver transplant by [Thomas Starzl](#) (Denver, U.S.A.)
- 1967: First successful heart transplant by [Christian Barnard](#) (Cape Town, South Africa)
- 1981: First successful heart/lung transplant by [Bruce Reitz](#) (Stanford, U.S.A.)

# Maastricht classification

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<b>Category</b>	<b>Type</b>	<b>Circumstances</b>	<b>Typical location</b>
1	Uncontrolled	Dead on arrival	Emergency Department
2	Uncontrolled	Unsuccessful resuscitation	Emergency Department
3	Controlled	Cardiac arrest follows planned withdrawal of life sustaining treatments	Intensive Care Unit
4	Either	Cardiac arrest in a patient who is brain dead	Intensive Care Unit

# Numbers in Canada

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From 2012 Canadian Institute for Health Information

NDD - 1230

DCD - 164

LR - 325

LUR - 134

LDPE - 25



# Numbers in Canada

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From 2012 Canadian Institute for Health Information  
DCD by province:

- Alberta - 3
- BC - 31
- Ontario - 130

## Current DCD Numbers



	DCD Referrals	DCD Accepted	Organs Transplanted
2007	0	0	0
2008	0	0	0
2009	3	1	Pancreas 2 kidneys
2010	7	1	Liver 2 kidneys
2011	13	3	2 kidneys One double lung
2012	7	1	2 kidneys
2013	9	3	

# Ethical Issues

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- Philosophical Concerns
- Practical Concerns

# Philosophical Concerns

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- The Dead Donor Rule (is it circular?)

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- Not “really” dead (essentialism problem, reversibility, etc.)
- Conceptual honesty and transparency

# Philosophical Concerns

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Two proposed solutions to addressing the philosophical concerns:

- 1) abandon the dead donor rule.
- 2) understand the declaration of death correctly as a convention, i.e. the consensus of an expert community for a particular purpose.

# 19<sup>th</sup> Century New York Bill

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- *First – Permanent cessation of respiration and circulation.*
- *Second – Purple discoloration of the dependent parts of the body.*
- *Third – Appearance of blistering around a part of the skin touched with a red hot iron.*
- *Fourth – The characteristic stiffness known as rigor mortis.*
- *Fifth – Signs of decomposition*



# Practical Concerns

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- conflict of interest (real or perceived)
  - fiduciary obligation (particularly ICU staff)

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  - fiduciary obligation
  - process management
  - perimortem procedures to facilitate transplant (heparin, cannulation, etc.)
  - conflicts between pts/families in small centres/small pt. populations.

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- Service with greatest vulnerability must control the process (ICU).
- Staff must feel supported both by clear policy and rationale regarding process, but also to conscientiously withdraw from the process. The process must be transparent.



# Some Last Thoughts

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- Identify the unique elements that both define and enable transplant and recognize conventions that serve and are limited by this community.

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- Understand transplant as a necessary transitional technology.
- Understand the fundamental communal values that make transplant possible, i.e. trust, compassion.
- Identify the unique elements that both define and enable transplant and recognize conventions that serve and are limited by this community. (pay to play?)
- Mitigate the conflict of interest faced by ICU staff by removing the burden of identification/selection of donors and addressing donation at a more appropriate time.

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Thanks, and please feel free to contact me!

Brendan is [bleier@ualberta.ca](mailto:bleier@ualberta.ca) or  
[brendan.leier@albertahealthservices.ca](mailto:brendan.leier@albertahealthservices.ca)