

Wellington Hospital Capital & Coast District Health Board		Patient Label	
DONATION AFTER CIRCULATORY DEATH (DCD)			
DATE: ...../...../.....			
<p><b>Criteria for identification of potential DCD donor:</b></p> <ul style="list-style-type: none"> <li>• On ventilatory support in ICU irrespective of diagnosis</li> <li>• Consensus that intensive therapies will be withdrawn in the near future</li> <li>• No age barrier.</li> </ul> <p><b>Advice is available by contacting the donor coordinator: 24 hour number 09 630 0935</b></p> <p>The following procedure for DCD is listed in approximate sequence</p>			
	Procedure	Action by √ when completed	Explanatory Notes
1	Agreement by the treating team that continuing intensive therapies is not in the patient's best interest.	Intensivist and ICU nurse	The decision to withdraw intensive therapies is made by the treating team in accord with good medical practice. This includes consideration of the patient's best interests, ethical standards and legal requirements.
2	Contact donor coordinator	Intensivist	Please discuss all patients who meet the above criteria for identification of the potential for donation with the donor coordinator on call. The donor coordinator will contact the ODNZ medical specialist on call, who in turn will phone the intensivist.
3	Discuss the possibility of DCD	Intensivist and ODNZ medical specialist	<p>These issues will be addressed</p> <ul style="list-style-type: none"> <li>• Likelihood of deterioration to brain death and possibility of DBD</li> <li>• Organs and tissues under consideration for DCD – lungs, liver, kidneys, heart valves and eyes</li> <li>• The doses of opioid and/or sedative the intensivist plans to use at the time of withdrawal of intensive therapies, The ODNZ medical specialist will not seek to modify this plan in any way.</li> <li>• Whether the interval between withdrawal of intensive therapies and death is likely to be within the timeframe for DCD</li> <li>• Whether or not referral to the coroner is required</li> <li>• Possible timing of withdrawal of intensive therapies</li> <li>• Whether the intensivist objects to giving heparin at the time of withdrawal of intensive therapies</li> <li>• The name of the intensivist who will be involved at the time of withdrawal of intensive therapies.</li> </ul>
4	Agreement to withdraw intensive therapies	Intensivist and ICU nurse	A patient with decision-making capacity and the patient's family/whānau and the treating team must agree to the withdrawal of intensive therapies before DCD can be considered.
5	Provide space and time for patient/whānau to attend to cultural/spiritual/emotional/social needs.	Intensivist and ICU nurse	Offer karakia and spiritual support to family/whānau during this time.
6	Notify ICU Link nurse	ICU staff	ICU staff notify ICU Link nurse.

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7	Donor Bloods	ICU staff	The label on the pink blood tube in the Donor Pack must be handwritten. Patient labels can be used on the other tubes and the form. Ensure all sections of the blood request form, including the Specimen Declaration, are completed. Donor coordinator will arrange courier to collect Donor Pack from ICU and transport to NZBS for testing (as soon as possible to prevent undue delays for the donor family/whānau). <b>Testing of bloods commences only after family/whānau has indicated intent to proceed with DCD.</b>	
8	Discuss organ donation with both the patient (if he/she has decision-making capacity) and the family/whānau	Intensivist, ICU Link nurse and ICU nurse	Discuss the possibility of organ donation and explain the DCD process including: <ul style="list-style-type: none"> <li>Continuation of care by the ICU team, including the use of opioid and/or sedation if required</li> <li>Whether therapy will be withdrawn in ICU or OT</li> <li>Family/whānau can only have a few minutes with their family/whānau member following death</li> <li>The organs and tissues that are under consideration</li> <li>Use of heparin</li> <li>If death does not occur within the required timeframe that DCD will not proceed but tissue donation can be facilitated following death.</li> <li>Confirm the intent of the family/whānau (and of a patient with decision-making capacity) to proceed with DCD.</li> </ul>	
9	Inform donor coordinator	Intensivist or ICU Link nurse	Inform donor coordinator of outcome of discussion. When family/whānau agreeable to donation, whether or not heparin will be given and whether referral to the coroner is required.	
10	Donor assessment	ICU Link nurse	Donor coordinator will request the information outlined in the ODNZ Intensive Care Guidelines: Section 8.4	
11	Medical/Social Questionnaire and Physical Assessment	ICU Link nurse	Complete Physical Assessment and meet with family/whānau to complete Medical/Social questionnaire. Email completed documentation to donor coordinator: <a href="mailto:contactus@donor.co.nz">contactus@donor.co.nz</a>	
12	Inform theatre team	Donor coordinator	Contact OT coordinator with early notification of DCD to enable planning for donor surgery. OT coordinator contacts OT Link nurse. Donor coordinator notifies anaesthetist on call.	
13	Agreement of the coroner	Intensivist	When referral to the coroner is required, agreement from the coroner for organ and tissue donation must be obtained before intensive therapies are withdrawn: 24 hr number 0800 266 800. The Chief Coroner agrees that, in planning for DCD, it is appropriate for the coroner to agree before death has occurred. Document outcome of the discussion and the name of the coroner involved on the Authority for Organ and Tissue Removal Form.	
14	Complete patient ID with police	Intensivist	When the coroner has accepted jurisdiction, request police to attend and complete patient ID while family/whānau is present, preferably while the patient is in the ICU and before withdrawal of intensive therapies.	
15	Confirm organs and tissues that can be donated	Donor coordinator	Contact transplant units with donor information and whether or not heparin will be given. Inform ICU staff of organs and tissues that can be donated.	
16	Cessation of enteral feeding for lung donation	Intensivist and ICU nurse	If lung donation planned, donor coordinator will ask ICU staff to cease enteral feeding and to aspirate the NG tube.	
17	Determine if family/whānau wish to be present at time of withdrawal of intensive therapies and death	Intensivist and ICU Link nurse	<ul style="list-style-type: none"> <li>If family/whānau members wish to be present, withdrawal of intensive therapies will take place in ICU Room 17 or 18.</li> <li>If no family/whānau members wish to be present at the time of withdrawal of intensive therapies, withdrawal will take place in OT 15.</li> </ul>	

	<b>Procedure</b>	<b>Action by</b> √ when completed	<b>Explanatory Notes</b>	<b>D O N A T I O N</b>
18	Written consent for organ and tissue donation	Intensivist and ICU Link nurse	Inform family/whānau of DCD process, the organs and tissues that are able to be donated and if heparin will be given before withdrawal of intensive therapies. Family/whānau representative signs Authority for Organ and Tissue Removal Form. If family/whānau is not present, verbal consent in accord with the Human Tissue Act 2008 is documented on Authority for Organ and Tissue Removal Form.	
19	Inform donor coordinator	Intensivist or ICU Link nurse	Inform donor coordinator whether consent has been obtained and for which organs and tissues, whether the family/whānau wish to be present and where withdrawal of intensive therapies will occur.	
20	Organisation of donor surgery	Donor coordinator	Organise OT time in liaison with ICU, OT coordinator and the donor surgical team(s). Confirm OT time and location of withdrawal of intensive therapies with ICU, OT and anaesthetist.	
21	Organisation of OT staff	OT coordinator	Organise OT staff (OT Link nurse, circulating nurses 1 or 2, anaesthetic technician if lung donation planned) who are to be involved.	
22	Patient care in ICU	ICU staff	Continue patient care, including maintenance of adequate MAP and oxygenation.	
23	Travel to donor hospital	Donor surgical teams and donor coordinator(s)	Donor surgical team(s) and donor coordinator(s) travel to hospital. Donor surgical team(s) enter and leave via the Mein Street hospital entrance. The OT Link nurse will meet the team(s) on arrival and assist to OT.	
24	OT 15 set up for donor surgery	Donor surgical team(s) and OT staff	Set up OT 15 for donor surgery. Trolleys are set up and remain uncovered in OT. Donor scrub nurse remains with sterile set-up. Donor coordinator informs ICU staff when OT set-up is complete.	
25	Planning meeting	Donor coordinator	Facilitate a meeting in the ICU seminar room prior to commencement of DCD process for those who will be involved: intensivist, ICU Link nurse, ICU nurse, OT Link nurse, OT nurse(s), anaesthetic technician (if lungs are being donated), donor surgical team(s) and donor coordinator(s). Staff will not be allowed to be involved in the DCD process if they have not been present at the planning meeting. Documentation will be checked at this meeting. OT staff will provide gowns and hats for ICU staff if withdrawal of intensive therapies will be in OT.	
26	Inform ICU staff	Donor coordinator	Inform ICU staff when OT staff are ready and donor surgical team(s) are gowned and gloved.	
<b>For withdrawal of intensive therapies in OT with no family/whānau present, go to No. 38</b>				
<b>For withdrawal of intensive therapies in ICU Rooms 17 or 18 with family/whānau present, continue from No. 27</b>				
27	Administration of heparin	Intensivist	Give heparin (300u/kg) prior to withdrawal of intensive therapies provided the intensivist does not think it will influence the process of dying.	<b>A F T E R</b>
28	Preparation for lung donation	Intensivist and ICU nurse	If lung donation planned, place patient in a 30 degree head up position. Aspirate the nasogastric tube and avoid external pressure to the abdomen.	

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	Procedure	Action by √ when completed	Explanatory Notes	D O N A T I O N  A F T E R  C I R C U L A T O R Y  D E A T H
29	Withdrawal of intensive therapies	Intensivist, ICU nurse and ICU Link nurse	Discontinue ECG monitoring and continue arterial pressure and pulse oximetry monitoring. Withdraw all intensive therapies (ventilation, ETT and inotropes) at the same time. An intensivist and ICU nurse remain with the patient until death has occurred. Any appearance of distress is treated with opioid and/or sedation in the same manner as would be done if intensive therapies were being withdrawn and DCD was not a possibility.	
30	Determination of death	Intensivist	Determine death on the basis of: <ul style="list-style-type: none"> <li>• Immobility</li> <li>• Apnoea</li> <li>• Absence of pulsatility on the arterial line of at least <b>5 minutes</b> duration</li> </ul> Notify donor coordinator and document time of death on the Determination of Death Form <b>If death does not occur within the required timeframe, DCD will not proceed. Tissue donation can be facilitated following death.</b>	
31	Inform donor surgical team(s) of death	Donor coordinator	Inform donor surgical team(s) and OT staff of death.	
32	Transfer of patient to OT	Intensivist,	Intensivist, ICU Link nurse and donor coordinator transfer deceased patient immediately to OT department doors. OT staff and donor coordinator(s) transfer patient to OT. If lung donation planned, the patient remains on the ICU bed. If abdominal organ donation only, the donor coordinator and OT staff transfer patient to OT table. The ICU nurse and ICU Link nurse provide care and support for the family/whānau.	
33	Check patient ID and Determination of Death Form	Donor surgical team(s), OT staff and donor coordinator	Donor coordinator completes patient ID and sights time of death documented on Determination of Death Form with donor surgical team(s) and OT staff.	
34	Re-intubate trachea for lung retrieval	Thoracic anaesthetist and anaesthetic technician	If lung donation planned, patient re-intubated immediately.	
35	Transfer of patient to OT table	Anaesthetic staff, OT staff and donor coordinator	If lung donation planned, anaesthetist, circulating nurses and donor coordinator transfer patient to OT table.	
36	Donor surgery	Donor surgical team(s)	Donor surgery commences immediately.	
<b>For care of patient following donation, go to No. 51</b>				
<b>For withdrawal of intensive therapies in OT with no family/whānau present, continue from No. 37</b>				
37	Transfer of patient to OT 15	Intensivist, ICU nurse, ICU Link nurse and donor coordinator	ICU staff not wearing scrubs require disposable gowns and hats but not overshoes and masks. Transfer patient using the transport trolley to OT 15. Continue arterial pressure monitoring and inotrope support, if required. Continue with pulse oximetry monitoring. Discontinue ECG monitoring. Take all medications that might be required, including heparin, opioids and sedation. Patient remains on ICU bed. Care is continued by Intensivist and ICU nurse until death has been determined.	

	Procedure	Action by √ when completed	Explanatory Notes	D O N A T I O N  A F T E R  C I R C U L A T O R Y  D E A T H
38	Sight patient ID	Thoracic anaesthetist or donor coordinator	If lung donation planned, thoracic anaesthetist completes patient ID with donor surgical teams and OT staff. If abdominal organs only, donor coordinator completes patient ID with donor surgical team and OT staff. All OT staff who are gowned and gloved wait in OT 15 stock room. All other OT staff wait in a room close to OT.	
39	Preparation for lung donation	Intensivist and ICU nurse	If lung donation planned, place patient in 30 degree head up position on the bed. Aspirate the nasogastric tube and avoid external pressure to the abdomen.	
40	Administration of heparin	Intensivist	Give heparin (300u/kg) prior to withdrawal of intensive therapies provided the intensivist does not think it will influence the process of dying.	
41	Withdrawal of intensive therapies	Intensivist, ICU Link nurse and ICU nurse	Withdraw all intensive therapies (ventilation, ETT and inotropes) at the same time. Continue arterial pressure and pulse oximetry monitoring (ECG monitoring will have been discontinued in ICU). An intensivist and ICU nurse remain with the patient until death has occurred. Any appearance of distress is treated with opioid and/or sedation in the same manner as would be done if intensive therapies were being withdrawn and DCD was not a possibility.	
42	Determination of death	Intensivist	Determine death on the basis of: <ul style="list-style-type: none"> <li>• Immobility</li> <li>• Apnoea</li> <li>• Absence of pulsatility on the arterial line of at least <b>5 minutes</b> duration</li> </ul> Notify donor coordinator and document time of death on the Determination of Death Form. All equipment remains in OT until after the donor surgery. <b>If death does not occur within the required timeframe, DCD will not proceed and care will be continued in ICU. Tissue donation can be facilitated following death.</b>	
43	ICU staff leave OT	ICU staff	All ICU staff leave the OT as soon as death has been determined and documented.	
44	Inform donor surgical team(s) of death	Donor coordinator	Inform donor surgical team(s) and OT staff (waiting in OT stock room and other adjacent room) of death. All ICU staff leave OT.	
45	Sight time of death on Determination of Death Form	Donor surgical team(s), OT staff and donor coordinator(s)	Donor coordinator completes sighting of death on Determination of Death Form with donor surgical team(s) and OT staff.	
46	Transfer of patient to OT table	OT staff and donor coordinator(s)	For donation of abdominal organs only, OT staff and donor coordinator(s) transfer patient to OT table (after ICU staff have left OT)	
47	Re-intubate trachea for lung retrieval	Thoracic anaesthetist and anaesthetic technician	If lung donation planned, patient re-intubated immediately (after ICU staff have left OT)	
48	Transfer of patient to OT table	Thoracic anaesthetist, OT staff and donor coordinator(s)	If lung donation planned, anaesthetist, circulating nurses and donor coordinator(s) transfer patient to OT table.	
49	Patient prepared for donor surgery	Donor surgical team(s)	Patient prepared and draped for surgery.	
50	Donor surgery	Donor surgical team(s) and OT staff	Donor surgery commences immediately.	

For care of deceased following donation, continue from No. 51			
Care of deceased following donation			
	Procedure	Action by √ when completed	Explanatory Notes
51	Completion of routine death documentation	ICU staff	Routine death documentation is the responsibility of the intensivist and ICU nurse. Refer to the ICU Deceased Persons Pack. ICU nursing staff notifies Duty Manager of death.
52	Care of deceased following donation	OT staff, donor coordinator(s) ICU Link nurse and ICU nurse	Following donation, care of the patient is carried out by OT staff and donor coordinator(s). If the family/whānau wish to spend time with the patient following the donation this is facilitated in ICU by the ICU nurse and ICU Link nurse. If the family/whānau is not present, the patient will be transferred directly to the mortuary.
53	For coronial cases	ICU medical staff	ICU registrar notifies police to complete Life Extinct Form and patient ID (if not already completed). Police and nursing staff or orderly transfer deceased patient to mortuary.

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