

<b>Whangarei Hospital</b> Northland DHB		Patient Label	
<b>DONATION AFTER CIRCULATORY DEATH (DCD)</b>			
DATE: ...../...../.....			
<b>Criteria for identification of potential DCD donor:</b> <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• Consensus that intensive therapies will be withdrawn in the near future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>			
<b>Advice is available by contacting the Donor Co-ordinator: 24 hour number 09 630 0935</b>			
The following procedure for DCD is listed in approximate sequence			
	Procedure	Action by √ when completed	Explanatory Notes
1	Agreement by treating medical team(s) that continuing intensive therapies is not in the patient's best interest.	Medical team(s)	The decision to withdraw intensive therapies is made by the treating team(s) 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	These issues will be addressed <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 donation – lungs, liver, kidneys, heart valves and eye tissue.</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	Donor Bloods	ICU Staff	The label on the pink blood tube in the Donor Pack must be handwritten. Patient labels can be used on all other tubes and the form. Ensure all sections of the blood request form, including the Specimen Request 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). <b>Testing of bloods commences only after family has indicated intent to proceed with DCD.</b>
5	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.

	<b>Procedure</b>	<b>Action by</b> √ when completed	<b>Explanatory Notes</b>
6	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.
7	Discuss organ donation with both the patient (if he/she has decision-making capacity) and the family/whānau	Intensivist and ICU nurse	Discuss 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 intensive therapies will be withdrawn in ICU or OT</li> <li>• Family/whānau can only have a few minutes with their family 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, 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>
8	Inform donor coordinator	Intensivist	Inform donor coordinator of outcome of discussion, whether or not heparin will be given and whether referral to the Coroner is required.
9	Donor Assessment	ICU nurse and donor coordinator	Donor coordinator will request the information outlined in the ODNZ Intensive Care Guidelines: Section 8.3.
10	Medical/Social Questionnaire & Physical Assessment	ICU nurse	Complete Physical Assessment and meet with family to complete Medical/Social questionnaire. Email completed documentation to donor coordinator: <a href="mailto:contactus@donor.co.nz">contactus@donor.co.nz</a>
11	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.
12	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.
13	Notify theatre team	Donor coordinator and ICU nurse	Contact theatre coordinator with early notification of DCD to enable planning for donor surgery. Theatre coordinator contacts OT staff (OT Link nurse, circulating nurses 1 or 2, anaesthetic technician if lung donation is being planned) willing to be involved. If afterhours, OT staff will remain on standby at home. The donor coordinator informs anaesthetist on call and independently calls the OT link nurse.
14	Confirm organs and tissues that can be donated	Donor coordinator	Contact transplant units with donor information and whether heparin will be given. Inform intensivist of organs and tissues that can be donated.
15	Cessation of enteral feeding for lung donation	Intensivist and ICU nurse	If lung donation is planned, donor coordinator will ask the ICU staff to cease enteral feeding.
16	Determine if family/whānau wish to be present at time of withdrawal of intensive therapies and death.	Intensivist and ICU nurse	If family/whānau members wish to be present, withdrawal will take place in ICU Room 3, if available. If no family/whānau members wish to be present at the time of withdrawal, withdrawal will take place in ICU or OT 2, if available. Donor coordinator will discuss location of withdrawal of intensive therapies with ICU staff involved.

	<b>Procedure</b>	<b>Action by</b> √ when completed	<b>Explanatory Notes</b>
17	Written consent for organ and tissue donation	Intensivist or donor coordinator	Inform family/whānau of DCD process, the organs and tissues that can 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.
18	Inform donor coordinator	Intensivist or ICU nurse	Inform donor coordinator whether consent has been obtained, for which organs and tissues, whether the family/whānau wish to be present and where withdrawal of intensive therapies will occur.
19	Organisation of donor surgery	Donor coordinator	Organise OT time in liaison with ICU, OT coordinator and the donor surgical team(s). OT coordinator determines if an OT is available when preferred time for DCD is during normal working hours. Confirm OT time with ICU, OT coordinator, OT link nurse and anaesthetist.
20	Organization of OT staff	OT coordinator	Inform OT staff (OT Link nurse, circulating nurses 1 or 2, anaesthetic technician if lung donation) of time for planned DCD and prepare OT. Provide name of donor coordinator who will be involved in the donor surgery.
21	Patient care in ICU	ICU staff	Continue patient care, including maintenance of adequate MAP and oxygenation. Ensure the patient is placed on a hover mat
22	Travel to hospital	Donor surgical teams and donor coordinator(s)	Donor surgical team(s) and donor coordinator(s) travel to hospital. Donor coordinator contacts OT Link nurse on arrival at hospital.
23	OT 2 set up, if available for donor surgery	Donor surgical team(s) and OT staff	Set up OT 2 if available 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.
24	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 nurse, OT Link nurse, OT nurses (1 or 2), anaesthetic technician (if lungs are being donated), HCA (ICU or OT), 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 confirm OT being used for donor surgery. OT staff will provide appropriate OT attire for ICU staff when withdrawal of intensive therapies is to be in OT.
25	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 ICU (Bedspace 3 if available) with family/whānau members present, continue from No. 26</b>			
<b>For withdrawal of intensive therapies in anaesthetic room next to OT 2 without family/whānau members present, go to No. 36</b>			
26	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.
27	Preparation for lung donation	Intensivist and ICU nurse	If lung donation is planned, place patient in 30 degrees head up position. Aspirate the nasogastric tube and avoid external pressure to the abdomen.

	Procedure	Action by √ when completed	Explanatory Notes
28	Withdrawal of intensive therapies	Intensivist and ICU nurse	Discontinue ECG monitoring and continue arterial pressure monitoring and pulse oximetry. 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.
29	Determination of death	Intensivist	Determine death based on: <ul style="list-style-type: none"> <li>• Immobility</li> <li>• Apnoea</li> <li>• Absence of pulsatility on the arterial line of at least 5 minutes 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>
30	Inform donor surgical team(s) of death	Donor coordinator	Inform donor surgical team(s) and OT staff of death.
31	Transfer of patient to OT	Intensivist, ICU Donation Link nurse, donor coordinator, and HCA (ICU or OT)	Intensivist, donor coordinator and HCA (ICU or OT) transfer deceased patient immediately to OT (Surgical Admissions Unit) department doors. Circulating nurses, HCA (ICU or OT) and donor coordinator transfer deceased patient into OT. If lung donation is 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 together with Takawaenga provide care and support for the family/whānau in the ICU. The family/whānau remain in the ICU.
32	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.
33	Re-intubate trachea for lung donation	Thoracic anaesthetist and anaesthetic technician	If lung donation planned, patient re-intubated immediately.
34	Transfer of patient to OT table	Anaesthetic staff, OT staff & donor coordinator	Anaesthetic staff (if lung donation planned), OT staff and donor coordinator and theatre assistant transfer patient to OT table.
35	Donor surgery	Donor surgical team(s)	Donor surgery commences immediately.
<b>For care of patient following donation, go to No. 50</b>			
<b>For withdrawal of intensive therapies in anaesthetic room next to OT 2, if available, with no family/whānau present, continue from No. 36</b>			
36	Transfer of patient to the anaesthetic room next to OT 2 (if available)	Intensivist, ICU nurse and donor coordinator	ICU staff who are going to be with the patient in the anaesthetic room and are not wearing scrubs require disposable gowns, hats and overshoes. Continue ventilation, arterial pressure monitoring and inotropic support, if required. Continue Pulse oximetry. Discontinue ECG monitoring. Transfer patient to the OT table in the anaesthetic room next to OT 2 (if available) using transport ventilator and monitor. Take all medications that might be required, including heparin, opioids and sedation. Intensivist and ICU nurse continue patient care in OT.

	Procedure	Action by √ when completed	Explanatory Notes
37	Transfer patient to OT table	Anaesthetist, OT nurses, donor coordinator & theatre assistant	If lung donation planned, anaesthetist, circulating nurses, donor coordinator and theatre assistant transfer patient to OT table. For abdominal-only donation, circulating nurses, donor coordinator and theatre assistant transfer patient to OT table.
38	Preparation for lung donation	Intensivist and ICU nurse	If lung donation planned, place patient in anti-Trendelenburg with head end of bed elevated to 30 degrees on the operating table. Aspirate the nasogastric tube and avoid external pressure to the abdomen.
39	Sight patient ID	Thoracic anaesthetist or donor coordinator	If lung donation is planned, thoracic anaesthetist completes patient ID with donor surgical team(s) and OT staff. If abdominal organs only, donor coordinator completes patient ID with donor surgical team and OT staff.
40	Patient prepared for donor surgery	Donor surgical team(s)	Patient prepared and draped for surgery. The donor surgical team(s) (gowned and gloved) leave the anaesthetic room and wait in OT 2.
41	Administration of heparin	Intensivist	If heparin is to be given, administer 300u/kg prior to withdrawal of treatment.
42	Withdrawal of intensive therapies	Intensivist and ICU nurse	Withdraw all intensive therapies (ventilation, ETT and inotropes) at the same time. Continue arterial pressure monitoring and pulse oximetry (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.
43	Determination of death	Intensivist	Determine death based on: <ul style="list-style-type: none"> <li>• Immobility</li> <li>• Apnoea</li> <li>• Absence of pulsatility on the arterial line of at least 5 minutes 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 and care will be continued in the ICU. Tissue donation can be facilitated following death.</b>
44	ICU staff leave OT	Donor coordinator	All ICU staff leave the OT as soon as death has been determined and documented. The donor coordinator and circulation nurse(s) transfer the OT table through to OT 2.
45	Inform donor surgical team(s) of death	Donor coordinator	Inform donor surgical team(s) and OT staff (waiting in OT 2) of death.
46	Sight time of death on Determination of Death Form	Donor surgical team(s), OT staff and donor coordinator	Donor coordinator sights time of death on Determination of Death Form with donor surgical team(s) and OT staff.
47	Re-intubate trachea for lung retrieval	Thoracic anaesthetist & anaesthetic technician	If lung donation planned, patient re-intubated immediately.
48	Donor surgery	Donor Surgical Team(s) & OT staff	Donor surgery commences immediately (after ICU staff have left OT).

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<b>For care of deceased following donation, continue from No. 50</b>			
<b>Care of deceased following donation</b>			
49	Completion of routine online death documentation	ICU staff	ICU staff follow normal protocol following death.
50	Care of deceased following donation	OT staff, donor coordinator and ICU staff	Following donation, care of the deceased is carried out by OT staff. If the family/ whānau wish to spend time with their relative following donation, this will be facilitated in the viewing room in the mortuary.
51	For Coronial Cases	ICU staff	Notification of Police is by ICU medical staff. Patient ID (if not already completed) and Life Extinct Form are completed. Police and nursing staff or porter transfer deceased patient to mortuary.

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Updated August 2023