



**Institutional Handbook of Operating Procedures**  
**Policy 09.15.10**

Section: Clinical Policies	Responsible Vice President: EVP & CEO UTMB Health System
Subject: End of Life Issues	Responsible Entity: Health System

**I. Title**

*Donation after Cardiac Death*

**II. Policy**

The University of Texas Medical Branch (UTMB) support and respect the rights of patients and surrogates to decide to forgo life sustaining treatment and to elect organ donation in the event of their death. Organ donation from patients that meet cardiac death criteria will provide the opportunity to increase the donor pool and, most importantly, assure that every opportunity is taken to carry out the wishes of the donor and family. Both the Institute of Medicine and Joint Commission for the Accreditation of Hospitals Organization have endorsed the development of hospital policies for participation in donation after cardiac death (DCD) programs that enable more patients to be transplanted in a way that provides for full information and disclosure to the donor's family while honoring the patient's wishes and/or wishes of the donor family.

**III. DCD Candidate Inquiries**

When a patient has suffered a devastating, irreversible neurologic injury or illness and the patient and/or family has decided to withdraw life support, the patient may be a candidate for DCD. Other potential donor diagnosis might include those with high spinal cord injuries or end-stage musculoskeletal disease.

1. If the patient or patient's family inquires about organ donation, the patient is referred to the appropriate organ procurement agency based on the location of the UTMB hospital location.

Galveston Campus League City Campus	Southwest Transplant Alliance (STA) (800) 201-0527
Angleton Danbury Campus Clear Lake Campus	LifeGift (800) 633-6562

2. If the option of organ donation has not been initiated by the patient or family, the health care professionals caring for the patient should decide whether to recommend such a discussion. It is recommended that the appropriate organ procurement agency be contacted prior to any discussion with the family.

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**IV. DCD Patient Evaluation**

It is recommended that the Ethics Consultation Service be consulted to evaluate the decision for withdrawal of life support and organ donation and to answer any questions that may arise.

The Organ Recovery Coordinator (ORC) on call, or their designee, will go on-site at the referring hospital to evaluate the patient for DCD according to the following guidelines:

The patient has suffered a devastating, irreversible neurologic injury or illness. At the time of referral, the ORC assesses the patient for likelihood of cardiac arrest based on a DCD assessment tool. In addition, the ORC consults with the healthcare team. Other potential donors might also have high spinal cord injuries or end-stage musculoskeletal disease.

**V. DCD Suitability Determination and Informed Consent Process**

Additional suitability for organ donation is determined in accordance with the appropriate procurement organization. A discussion with the patient's family and the physician and/or health care team members is held to determine the family's understanding of the patient's condition and expected prognosis and outcome. If the family continues to request that treatment be discontinued and DCD has been determined to be an option for the family to consider, informed consent for donation should be obtained by the appropriate organ procurement organization to include the following considerations:

1. The family has been fully informed of all donation options including:
  - a. The option of waiting for brain death to occur, if that is deemed a possibility.
  - b. The specifics of DCD procedure.
  - c. Allowing for cardiac arrest followed by tissue donation.
  - d. The option to not donate.
2. The opportunity of attending the withdrawal of treatment and the death of the patient but the necessity of leaving the patient quickly following cessation of circulation.
3. The use of medications for anticoagulation and vasodilatation in order to aid organ preservation but providing no direct benefit to the patient.
4. The need for cannulation of large arteries to aid in organ preservation after cessation of circulation.
  - a. If the family chooses to donate, then consent for donation is be completed and executed by the appropriate organ procurement agency.
  - b. The family is informed that if the patient does not expire within 60 minutes of extubation, the organ recovery procedure is abandoned, and the patient is returned to the patient care unit without the donation of organs. Tissue donation can be an option following cardiac arrest.

To facilitate the organ recovery, the patient must be maintained on a ventilator and hemodynamically supported for organ perfusion until the withdrawal of treatment. The ORC works with the hospital staff to request tests and consults that may be needed to determine suitability of the patient as an organ donor. The ORC coordinates with the hospital and recovery teams in determining the timing of the withdrawal of life support and the operative procedure.

**VI. Standard of Care and Comfort Required for DCD Candidates**

Standard of care and comfort measures will be administered during the period prior to withdrawal, and comfort care will be provided after withdrawal and until circulation ceases. No donor related medications shall be administered, or donation related procedures performed without consent.

Once the patient has been moved to the operating room, prepped and draped, and all the necessary recovery equipment and preservation supplies are in place, the surgical recovery team leaves the room. No member of the transplant team shall be present for the withdrawal of life-sustaining treatments. The ventilator/life sustaining treatments are discontinued, and the patient extubated. If the family has chosen to be with the patient during the withdrawal of treatment, they may enter the operating room once the surgical team has departed. Care during this time is provided by the ICU nursing staff and ICU attending physician.

**VII. Determination of Death**

Death must be pronounced by attending (faculty) physician caring for the patient or an intensivist or designee, who is not associated with or a part of the recovery or transplant teams and will not care for the recipient. The diagnosis of death requires confirmation of:

1. Correct EKG lead placement, and
2. A pulse of zero via the arterial catheter or EKG
3. A zero blood pressure via arterial catheter or NIBP monitor and
4. Patient is pulseless, apneic and unresponsive to verbal stimuli and
5. Given all of the above, any one of the following electro-cardiographic criteria will be sufficient for certification of death:
  - a. ventricular fibrillation
  - b. asystole (no complexes, agonal baseline drift only)
  - c. pulseless electrical activity (PEA)

Shortly (1-2 minutes) after spontaneous respiratory and circulatory functions have ceased, the family, if present, will be escorted into waiting area.

Once the cessation of cardiac function has occurred, five (5) minutes must elapse before death is officially pronounced and organ recovery can begin. This period shall be timed and documented in the medical record. During this wait period (once above criteria for diagnosis of death are met but before organ recovery begins), cannulation may occur if not performed previously.

If the donor has not experienced cessation of cardiac function within 60 minutes, the patient will be returned to the ICU; and the family will be notified if they are not present. The attending physician or designee will write orders for continued comfort care.

**VIII. Definitions**

Brain death is the irreversible cessation of the function of the whole brain.

Cardiac death is the irreversible cessation of spontaneous respiratory and circulatory functions.

**IX. Relevant Federal and State Statutes**

[Texas Health and Safety Code § 692A.015](#)

[Texas Health and Safety Code Chapter 671](#)

**X. Related UTMB Policies and Procedures**

[IHOP - 09.15.01 - Disposition of Deceased Patients](#)

[IHOP - 09.15.09 - Determination of Death](#)

**XI. Dates Approved or Amended**

<i>Originated: 04/30/08</i>	
<i>Reviewed with Changes</i>	<i>Reviewed without Changes</i>
07/18/13	08/25/16
01/09/2020	

**XII. Contact Information**

Health System Administration – 409-772-6631