



LifeLink® Donation After Circulatory Death (DCD) Fact Sheet

Donation After Circulatory Death (DCD) Process

- Organ donation takes place after a patient is declared dead either by neurologic criteria (DNC) or after compassionate extubation results in asystole/circulatory death. Both pathways successfully provide organs for transplant.
- LifeLink coordinators will partner and communicate frequently with the healthcare team throughout the donation process, beginning from the time of referral and continuing throughout family discussion, donor management, and organ recovery.
- The table below compares organ recovery for brain death and DCD donation processes, followed by an outline of the roles of the healthcare and LifeLink teams.

Comparing Donation After Brain Death/DNC and DCD

Donation After Brain Death/DNC		DCD
Injury	The patient has suffered a severe brain injury from trauma, a cerebral vascular accident, anoxic event, respiratory failure or other injury, and is dependent on medical therapies	
Meets Criteria for Brain Death	Yes <ul style="list-style-type: none">• Patient has been declared brain dead after two clinical exams• If the physician determined necessary, confirmatory testing complete	No, the patient does not meet criteria for brain death
Prognosis	Patient is brain dead	No long-term prognosis for recovery from injury; family has decided to proceed with CMO/AND
Action	<ul style="list-style-type: none">• Patient is referred to LifeLink• Two board-certified or board-eligible physicians perform brain death testing per the hospital's policy• LifeLink verifies if the patient is a registered donor on the state registry• LifeLink discusses donation with the legal next-of-kin and discloses donor registration status or seeks authorization• LifeLink assumes medical management of patient and places organs for transplant• Patient remains on ventilator until organs recovered• Transplant team(s) recovers organs• Heart, lungs, liver, pancreas, kidneys and intestines can be recovered for transplant• Organs not suitable for transplant may be recovered for research	<ul style="list-style-type: none">• Patient is referred to LifeLink• LifeLink discusses donation with family once they are considering compassionate withdrawal• LifeLink verifies if the patient is a registered donor on the state registry• Patient's treatment remains under care of hospital attending physician• Hospital medical team proceeds with terminal extubation in OR per hospital policy• Organ recovery surgeons/teams are restricted from the OR at the time of extubation and until death has been declared• Patient expires within the designated timeframe, approximately 1-2 hours• Hospital team declares death by cardiac criteria per hospital policy• Following asystole and declaration of death there is a 5-minute waiting period prior to incision• Following 5 minutes with no return of spontaneous circulation (ROSC), the transplant team begins organ recovery• Heart, lungs, liver, pancreas, intestines and kidneys may be recovered for transplant• Recovering team may utilize normothermic regional perfusion (NRP) therapy to increase the number of organs for transplant and improve recipient outcomes• NRP will increase the time in the OR and number of transplant team members needed• Organs not suitable for transplant may be recovered for research

DCD Organ Recoveries: Hospital Team Roles and Responsibilities

Physician

- Maintains medical management of patient in the unit and until death is declared in OR
- Provides orders for organ-specific tests
- Declares brain by neurologic criteria in the event the patient becomes areflexic
- Works with LifeLink coordinator to determine management for organ optimization
- Determines medications for comfort measures during compassionate extubation
- Changes patient code status to DNR

Respiratory Therapist

- Participates in care team and LifeLink conversations regarding withdrawal of life-sustaining therapies
- Performs O₂ challenges throughout case at appropriate intervals
- Assists in maintaining optimal lung performance throughout with needed therapies and interventions
- Continues ventilator management in ICU and to OR
- Assists in transporting patient to OR
- Extubates patient in OR (remains with patient from unit transport until extubation in OR)

Pastoral Care and Spiritual Services

- Meets spiritual and religious needs of the patient and family
- Serves as family advocate in collaboration with medical and nursing staff
- Helps to coordinate Donate Life flag raisings (as applicable)

Critical Care Nurse

- Makes the referral call to LifeLink when indicated by clinical triggers
- Continues to provide care to families throughout the patient's hospitalization
- Coordinates clinical management of the patient and support for the family
- Provides plan-of-care (POC) updates to LifeLink if end-of-life therapies are being considered, and continues POC throughout the donor evaluation process
- Serves as the designee(s) to declare death in the operating room per hospital policy
- Provides comfort medications in OR as directed by hospital policy
- Maintains care of patient until asystole
- Completes record of death prior to organ recovery
- Orders blood to be retrieved by OR staff and in the OR at the start of the case (as applicable)

*OR Team

- If utilizing NRP, contacts and coordinates with BioMed for equipment check
- Ensures OR is available for LifeLink surgical technicians to complete set up prior to scheduled time
- Ensures blood is available in the OR (as applicable)
- Ensures adequate amounts of chairs and drapes for family presence
- Remains in OR for patient preparation and following asystole (can stay in OR with surgical team during withdrawal process if desired)
- Returns unused blood to blood bank after completion of organ recovery per hospital protocol

*Anesthesiologist (Lung Recovery)

- Reintubates patient following asystole
- Hyperinflate lungs prior to recovery

**Donor registration or family authorization for organ donation or patient registry serves as authorization for all tests/procedures required in the operating room and/or relating to anesthesia*

DCD Organ Recovery: LifeLink Team Roles and Responsibilities

Family Care Coordinator (FCC)

- LifeLink Family Care Coordinators will assist families before, during, and after organ recovery
- Stays with family to provide emotional support leading up to the withdrawal process (prior to OR), during, and following the compassionate extubation
- Briefs family on what to expect in the OR
- Brings family to OR when the team is ready for extubation
- Helps to facilitate honor walk, including path to walk (as applicable)

Surgical Coordinator (SC)

- Arrives prior to scheduled OR time to prepare for recovery
- Determines and discusses equipment, set up, process and other needs with OR staff
- Provides equipment to Sterile Processing Department (SPD) (as applicable)
- Assists surgeon(s) throughout the preparation, procedure and completion of recovery

Transplant Coordinator (TC)

- A minimum of two transplant coordinators are present for every DCD case
- Guides the OR team and ensures everyone understands their role and responsibilities
- Maintains communication with FCC, onsite surgical recovery teams, transportation services, and other parties throughout the OR process.
- Leads the time out
- Directs timing for extubation and heparin administration (typically determined by family readiness)
- Monitors and documents vital signs throughout the withdrawal process
- Directs OR staff when appropriate to verify cardiac time of death
- Assists surgical teams as needed
- Completes paperwork and provides to appropriate parties (medical examiner, eye bank, tissue bank, hospital)



LifeLink® Donation After Circulatory Death (DCD): Family Care

Role of the LifeLink Family Care Coordinator

- Family Care Coordinators (FCCs) guide families through the organ donation process when a loved one becomes a potential donor. Working closely with the hospital, FCCs provide clear, timely information about what to expect, the steps involved, and the life-saving impact of donation.
- During moments of intense emotion, FCCs offer steady, empathetic support. They help families navigate uncertainty, easing confusion by compassionately and clearly explaining the Donation after Circulatory Death (DCD) process, ensuring families understand each phase and feel supported every step of the way.

Before Recovery FCCs	During Recovery FCCs	After Recovery FCCs
<ul style="list-style-type: none"><input type="checkbox"/> Provide clear information to the family about the extubation process, physical environment, and anticipated timeline through asystole.<input type="checkbox"/> Accompany the family to a private, quiet location near the OR while the patient and surgical suite are prepared.<input type="checkbox"/> Assist the family with donning personal protective equipment (PPE).<input type="checkbox"/> Participate in OR team rounds and huddles to address questions and concerns.<input type="checkbox"/> Ensure the OR is as comfortable and welcoming as possible for the family and patient prior to their arrival.<input type="checkbox"/> Collaborate with the hospital team to plan the honor walk and determine the route.	<ul style="list-style-type: none"><input type="checkbox"/> Remain with the family throughout the recovery process.<input type="checkbox"/> Serve as the central point of contact between the hospital care team and the family, providing emotional support and clear communication.<input type="checkbox"/> Coordinate music to be played in the OR per the family's request.<input type="checkbox"/> Assist with pairing and placement of patient Bluetooth headphones, if applicable.<input type="checkbox"/> Maintain an environment of privacy, dignity, and respect for the family during the transition from life to donation.	<ul style="list-style-type: none"><input type="checkbox"/> Support the family in saying final goodbyes after asystole, offering emotional presence and guidance.<input type="checkbox"/> Escort the family from the OR and hospital. If the patient does not pass within the clinical timeframe for donation, accompany the family and patient to the designated hospital room for continued care and support.<input type="checkbox"/> Provide the family with an update on the final outcome, whether or not they were present in the operating room.

Comfort and Preparation Items for Families Prior to OR Entry

- ☐ A private room located within walking distance of the OR
- ☐ PPE in accordance with hospital policy for each family member (hair cap, mask, scrub suit/bunny suit, and shoe covers)
- ☐ Chairs in the OR, based on the number of family members present
- ☐ Tissues and emesis bags for emotional and physical needs
- ☐ Blankets to provide warmth and comfort
- ☐ A suction setup in the OR to ensure patient comfort
- ☐ Hygiene items for patient care



LifeLink® Operating Room Checklist

All Donors: Donation After Circulatory Death (DCD) & Donation After Death by Neurological Criteria (DNC)/Brain Death (BD)

- ☐ Obtain contact information for the LifeLink Coordinator (LLC).
- ☐ Huddle with the LLC to discuss the summary of the donation process and operating room (OR) timing.
- ☐ Verify authorization for organ donation.
- ☐ Determine who will transport the patient to the OR.
- ☐ Ensure LifeLink retractors are sterilized per sterile processing department (SPD) protocol.
- ☐ Complete the Death Record form.
- ☐ Obtain ice for organ preservation as needed.
- ☐ Notify pathology, as applicable per hospital protocol.
- ☐ Obtain two Neptunes and two Bovies.
- ☐ Obtain a Tru-Cut biopsy needle if liver recovery is planned.
- ☐ Verify whether the donor is under medical examiner jurisdiction.
- ☐ Place a shroud on the OR table (under linens).

Donation After Brain Death/Death by Neurological Criteria (BD/DNC)

- ☐ Ensure a code cart with internal paddles is present in the OR.
- ☐ Confirm anesthesia personnel are present and available to remain in the OR following lung recovery, as applicable.
- ☐ Ensure a bronchoscopy cart is present if lung recovery is planned.

Donation After Circulatory Death (DCD)

- ☐ Determine who will retrieve blood from the blood bank and ensure it is present in OR at the beginning of organ recovery.
- ☐ Ensure anesthesia personnel are present (and available to remain in the OR if lung recovery is planned).
- ☐ Confirm Biomed will check equipment if normothermic regional perfusion (NRP) is being utilized.
- ☐ Return unutilized blood to blood bank upon completion of organ recovery.
- ☐ Ensure extra chairs and IV poles are available if the patient's family will be present in the OR.
- ☐ Secure a private room for the family to wait in while the OR is being prepared.
- ☐ Identify a suitable place for the organ recovery teams to be stationed during the patient's withdrawal process (i.e. a sub-sterile area).



LifeLink® Operating Room Supply List

All Donors: Donation After Circulatory Death (DCD) & Donation After Death by Neurological Criteria (DNC)/Brain Death

General Needs:

- ☐ 3-4 tables (*1 each for hospital surgical technician, LifeLink surgical coordinator, LifeLink transplant coordinator, and lung/heart transplant team if applicable*)
- ☐ Ring stand
- ☐ 1-2 suction machines
- ☐ 2 Bovie machines
- ☐ Slush machine and drape (*if available*)
- ☐ Bronch scope and tower (*only if recovering lungs, disposable preferred*)
- ☐ Code cart with internal paddles (*have available and close by; if heart is recovered, open paddles and set up code cart*)

Instruments:

- ☐ Saw, battery, blade, or nitro saw
- ☐ CV tray
- ☐ Major tray

Sutures and Ties:

- ☐ 0 silk ties
- ☐ 2-0 silk ties
- ☐ 2-0 silk pops (hold)
- ☐ 4-0 Prolene RB1 x 2 double armed (*hold; only if recovering heart*)
- ☐ 4-0 Prolene x 3 (*single armed if available*)

Extra Supplies:

- ☐ Ice for packing organs for transportation
- ☐ Body bag
- ☐ Shoulder roll
- ☐ Extra towels
- ☐ Extra laps
- ☐ Extra XL gowns
- ☐ Variety of glove sizes
- ☐ 2 suction tubings
- ☐ Poole suction
- ☐ Largest loban
- ☐ Asepto/bulb syringe
- ☐ Large disposable clip applier

Hold Items:

- ☐ Small and medium disposable clip applier
- ☐ True-cut needle biopsy
- ☐ Telfa
- ☐ 4 specimen cups
- ☐ Raytecs (*for pediatric cases only*)
- ☐ 75 or 80 GIA stapler with x8 reloads
- ☐ TA stapler with x3 reloads
- ☐ Ligasure
- ☐ Toomey syringe

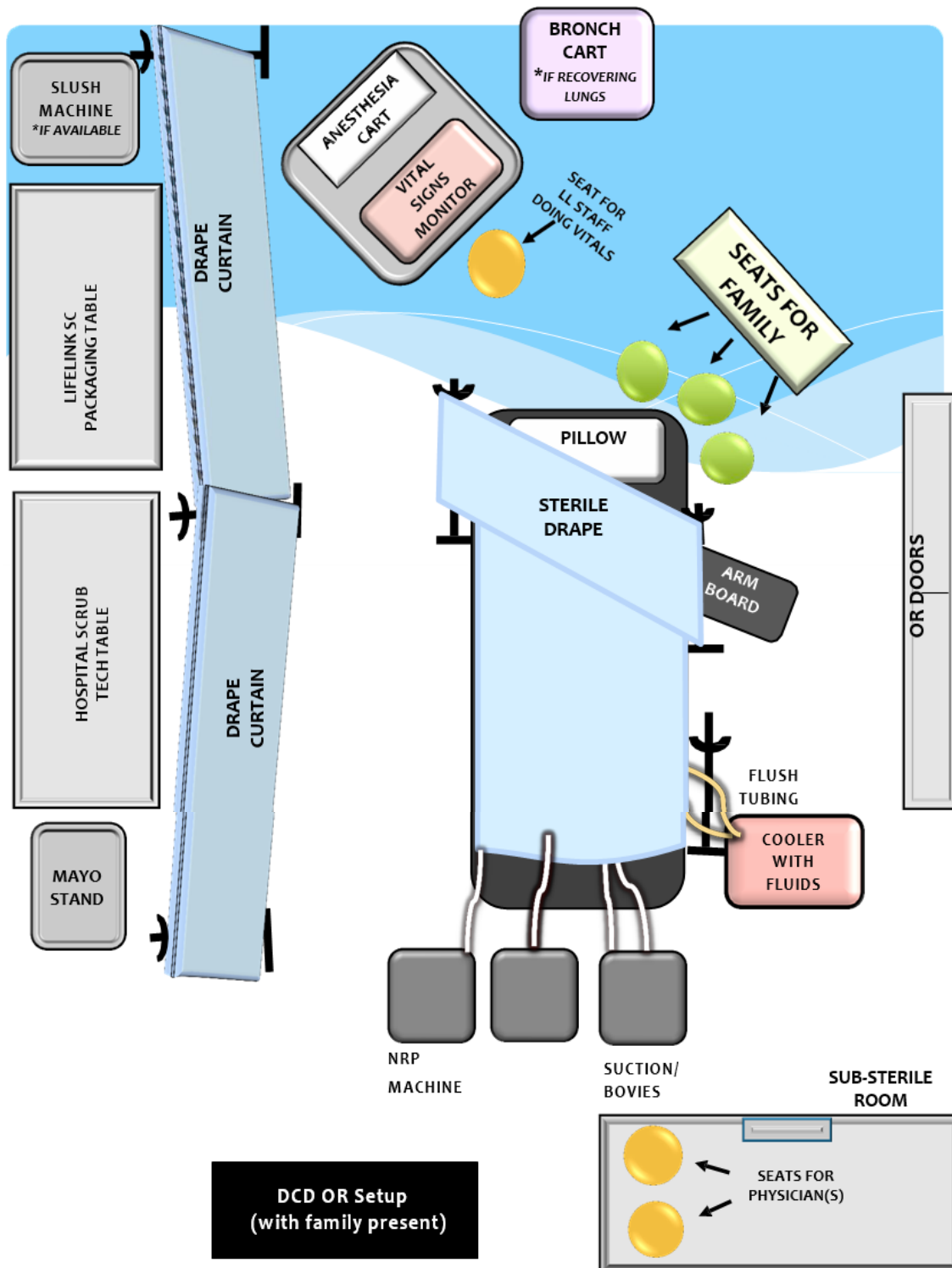
Donation After Circulatory Death (DCD): Extra Supplies

- ☐ 2x 10 blades (*have a total of 3 #3 knife handles*)
- ☐ 3-4 IV poles (*if family will be present in the OR*)
- ☐ 3-4 ¾ sheets or sheets (*if family will be present in the OR*)
- ☐ Sitting stools or chairs (*1 per family member if present in the OR*)
- ☐ 1 arm board, will tuck the opposite arm away from family
- ☐ Pillow for patient (*shoulder roll will be needed, placed after the patient is declared*)



LifeLink® Donation After Circulatory Death (DCD) Operating Room Set-Up

DCD Set Up Diagram



DCD Set Up Examples



Extra table in the OR for LifeLink Transplant Coordinator to package and label organs for transport



Shroud placed first, then OR linens



Placement of the suction and Bovie machine (dependent on size of the room and organs being recovered)

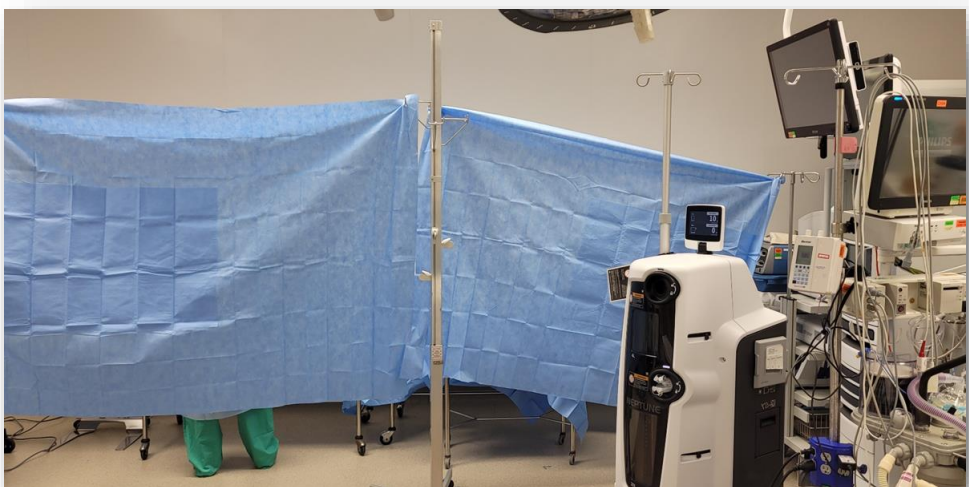
Note: Bovie machines only used for normothermic regional perfusion (NRP)



Standard set-up for
LifeLink surgical
technician



Standard set-up for
LifeLink surgical
coordinator



Curtain to limit view of
equipment in respect of
the family when
present