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Introduction to Lifebanc

Who We Are

Lifebanc, a nonprofit organ and tissue recovery organization, serves Ohio’s Northeast region of the state. Lifebanc is one of the seven original Organ Procurement Organizations (OPO) in the U.S., serving nearly four million people and working with 80 hospitals in 20 counties. Lifebanc is a member of the Organ Procurement and Transplantation Network (OPTN), which is managed by the United Network for Organ Sharing (UNOS). Lifebanc works closely with local partners, as well as other OPOs in Ohio to educate the public and healthcare professionals about the benefits of and need for organ, eye and tissue donations.

Lifebanc has been transforming and healing lives for more than 25 years.

Who We Serve

Hundreds of thousands of Ohioans are alive today because of Lifebanc. Along with serving the public, medical community and donor hospitals, Lifebanc provides life-saving organs to two transplant centers: The Cleveland Clinic and University Hospitals Cleveland Medical Center. Recovered tissue is transplanted countless times in hospitals throughout the region.

Lifebanc was instrumental in helping the Cleveland Clinic transplant team perform the nation’s first near-total face transplant in 2008, and establishing the world-record for the most lungs transplanted by a hospital in a single year in 2009.

Annually, Lifebanc volunteers and staff educate nearly 100,000 students and adults in an effort to provide accurate information, engage the public and increase the number of registered organ, eye and tissue donors. Lifebanc also provides bereavement support and services to families touched by donation.

Mission, Vision & Values

Lifebanc Mission: Lifebanc saves and heals lives through organ, eye and tissue donation for transplantation.

Lifebanc Vision: Pursuing a future when the decision to donate is an honor and everyone waiting receives a transplant.

Lifebanc Values: Service, Teamwork, Integrity, Commitment

Lifebanc Diversity Statement

Lifebanc is committed to a diverse and inclusive work environment. We recognize that diversity is crucial to the success of our organization and seek to develop strategies to ensure that our workforce is reflective of the community population. In addition, Lifebanc supports diversity initiatives within the organization which serve to educate our staff members and highlight their broad range of perspectives.

Lifebanc also supports board diversity and involves our board members in key leadership positions and committees which support inclusion.

Finally, Lifebanc recognizes the importance of supplier diversity and seeks to contribute to the development of underused suppliers while diversifying our vendor base.
The Lifebanc Staff

Donor Referral Coordinators (DRCs)

- Staff the Lifebanc Donor Referral Center-handle all incoming calls.
- Facilitate the donation process through interaction with hospital personnel, tissue processors and recovery staff.
- Collect and interpret patient medical and social history information (Lifebanc is HIPAA exempt), and triage donor referral calls.
  - They do not handle organ cases but will direct the call to the appropriate team.
- Discuss the opportunity of tissue and/or eye donation with potential donor’s next of kin and obtain consent/disclosure for tissue and eye donation via telephone.

Procurement Transplant Coordinators (PTC)

- Responds to the initial referral call from the hospital.
- Conducts onsite chart evaluations of the patient referred.
- Call the unit daily to obtain updates on the patient: Neuro status, sedation, paralytics, vasopressors, vital signs, code status, hospital/family plans.
- Collaborates with hospital staff regarding brain death testing, donor management and testing, and through the organ recovery process in the OR.
- Documents all pertinent hospital data and uploads that information to a national database (UNOS).
- Allocates organs following national waitlists and UNOS policies.
- Coordinates the travel to the donor hospital and the OR processes with the recovering teams.

Family Support Liaisons (FSLs)

- Participate with the healthcare team during end of life discussions with families of potential organ and tissue donors.
- Approach the patient’s next of kin for organ and tissue donation, in collaboration with hospital staff.
- Remain at the hospital with the donor family, providing emotional support during the donation process.

In-House Organ Donation Coordinators (IHCs)

- Facilitate the organ and tissue donation process at their specifically assigned hospital(s) by:
  - Responding to referrals
- Discussing the opportunity for donation with patient’s next of kin
- Providing emotional support for donor families during the donation process
- Serve as the onsite resource for hospital staff, providing education and fostering professional relationships.

Procurement Transplant Coordinators (PTCs)

- Provide clinical support through organ donor evaluation, medical management and surgical recovery.
- Gather serology samples for viral testing and tissue typing.
- Work with healthcare team to facilitate diagnostic tests and procedures needed for adequate organ evaluation.
- Make organ offers to transplant centers (according to UNOS regulations - always offered locally first).
- Schedule the OR time and coordinate recovery teams and intraoperative procedures.

Surgical Organ Recovery Coordinators (SORCs)

- Provide onsite organ recovery and perfusion support for surgeons, and may serve as surgical first assistants.
- When applicable, perform biopsies and recovery of organs for research.
- Perform machine pulsatile perfusion of kidneys.
- Responsible for transportation of specimens, organs and/or surgical recovery teams to hospitals and transplant centers.

Tissue Recovery Specialists

- Perform all aspects of the surgical recovery of eyes and tissues, including:
  - Medical record review
  - Physical assessment
  - Plasma dilution
- Blood draw for infectious disease testing to evaluate donor suitability for transplant
- Prepare the recovery area and donor body for aseptic tissue recovery.
- Perform recovery, reconstruction and preparation of the donor body for transfer to funeral home or coroner/medical examiner.

Hospital Services Coordinators (HSCs)

*Every hospital has an assigned coordinator*

- Responsible for optimizing organ, eye and tissue donation outcomes in the Lifebanc service area.
- Educate hospital staff on organ, eye and tissue donation processes to optimize outcomes and increase the number of organs and tissue available for transplant.
- Cultivate relationships with hospital personnel to promote donation and advance donation as part of the hospital mission.

Medical Records Specialists

- Conduct medical record reviews for donor hospitals to ensure compliance with CMS standards.
- Analyze appropriateness and timeliness of referrals for organ donation, and identify any missed referrals.
- Report any failures to meet CMS donor hospital standards to appropriate Hospital Services or In-House Coordinator for follow-up.

Bereavement Services:

- Provide assistance, resources and bereavement services to the families of all deceased organ, eye and tissue donors.
- Facilitate correspondence between donor families and recipients, and provide recipient updates to donor families as requested.
- Contact donor families at appropriate intervals to assist and support them during their grief journey.
- Assess the needs, responses, coping skills and support systems of donor families and provide follow-up/counseling as indicated.

Community Services:

- Responsible for advancing public awareness about the need for and benefits of organ, eye and tissue donation.
- Provide comprehensive outreach and education to high school and college students, as well as in driver’s training programs.
- Develop and coordinate initiatives to increase the number of registered donors in all communities in the Lifebanc service area.
- Increase the visibility and promote the mission of Lifebanc across Northeast Ohio, with special efforts aimed at multicultural and faith-based communities.
Introduction to Organ and Tissue Donation

The need for registered organ and tissue donors in Ohio and across the United States is a critical one. One organ donor can save eight lives, and one tissue donor can enhance the lives of more than 50 people.

The Need: Stats and Facts about Organ and Tissue Donation

• Nationally, nearly 125,000 men, women and children are currently waiting for life-saving transplants, and thousands of them are Northeast Ohioans. Millions more suffer with conditions that can be successfully treated with donated tissue and corneas.

• Every 13 minutes a new name is added to the national waiting list.

• On average, 21 people in the U.S. die each day because an organ is not available in time for transplant.

• In Ohio, there are more than 3,500 people on the national waiting list. Over 2,000 live right here in Northeast Ohio.

How can someone register to become an organ donor?

In Ohio, people can register to be an organ, eye or tissue donor on the Donate Life Ohio website at www.donatelifeohio.org (a valid Ohio driver’s license or state identification card is required to register). Or, contact Lifebanc for a donor registry enrollment form (or print this PDF) and mail it to the Ohio Bureau of Motor Vehicles (bmv.ohio.gov).

Everyone who obtains or renews their driver’s license or identification card is asked if they would like to be an organ and tissue donor, and the information is indicated on the driver license or ID card and entered in the Ohio Donor Registry. A person’s decision to be a registered organ, eye and tissue donor makes their donor designation legally binding. However, the person can request to be removed from the Ohio Donor Registry by contacting the BMV at any time.

In other states, people can sign up as an organ and tissue donor in their state’s donor registry.

To cover all bases, organ donors should:

• Designate their decision on their driver’s license or state identification card

• Tell their family about their donation decision

• Tell their physician, faith leader and friends

• Include organ donation in their advance directives, will, living will, and durable power of attorney

Ohio Donor Registry

The Ohio Donor Registry is a secure database that ensures a person’s decision to be an organ, eye and tissue donor will be honored. The Ohio BMV maintains the registry.

By joining the Ohio Donor Registry, residents are legally giving consent for the anatomical gift of organs, tissues and eyes upon death, for any purposes authorized by law. The Ohio Donor Registry provides organ, tissue and eye recovery agencies 24-hour access to an individual’s donation authorization. This information allows organ procurement agencies to act on that authorization as an advance directive.

The information in the Ohio Donor Registry database is strictly confidential. Access to the registry is limited to licensed and certified organ, tissue and eye recovery agencies. It will only be used at the time of death to obtain a person’s wishes regarding organ and tissue donation. The organ procurement agency will communicate the donor’s decision to be an organ and tissue donor with his or her family.

Common Organ Donation Q&As

Are there age restrictions on who can be an organ or tissue donor?

There is no age restriction to being a registered organ, eye and tissue donor. All people regardless of age should consider themselves potential organ and tissue donors. In all cases, medical professionals will determine the donor’s medical suitability for organ donation.

What medical conditions exclude a person from being considered as an organ donor?

Doctors will evaluate the condition of the potential donor’s organs to determine medical suitability. The transplant team’s decision will be based on a combination of factors, such as the donor’s specific illness and physical condition to determine which organs and tissues can be donated.
Will the health care team try to save a patient’s life if they know the patient is a registered organ donor?

Yes. Paramedics, doctors and nurses will do everything possible to save a patient’s life. The medical staff is completely separate from the transplant team. The OPO (organ procurement organization) is called only after all efforts to save the patient’s life have been exhausted.

Are there any religious objections to donation?

All major religions in the United States support organ, eye and tissue donation and view it as a final act of generosity and compassion toward others. Read more about religious views and organ donation.

What does organ and tissue donation cost the donor’s family?

Organ and tissue donation costs nothing to the donor’s family or estate. Lifebanc or the organ procurement organization of the region is responsible for all costs related to the donation process. Medical treatments prior to the declaration of death, funeral costs, memorial services or burial plans remain the family’s responsibility.

Will organ or tissue donation affect funeral arrangements?

Highly trained medical professionals recover organs and tissue during a surgical procedure that is performed in a respectful manner. In most cases, traditional funeral practices - including open-casket viewing - may follow the donation process if the family so chooses.

Can celebrities or wealthy people use their money and influence to buy an organ or be placed at the top of the waiting list?

Race, age, religion, income and celebrity status are not considered when determining who receives an organ. In fact, it is a federal crime to buy or sell organs in the United States. Donor organs are matched to potential recipients by tissue type, size, medical urgency, time on waiting list and geographic location. This matching process occurs using a UNOS-operated national computerized waiting list.

Will the donor’s family know the identity of the organ recipient(s)?

The identities of the donor and the recipient(s) remain confidential. The donor family may opt to receive a letter that confirms the success of transplantation(s) and includes some general information about each recipient. Recipients and donor families that elect to communicate with each other can do so with the help of a Lifebanc Bereavement Coordinator. Please contact 888.558.LIFE (5433) or 216.752.LIFE(5433) for more information on available services.
Centers for Medicare & Medicaid Services (CMS) Conditions of Participation

Hospitals that receive reimbursement from Medicare and/or Medicaid must notify their local organ procurement organization (OPO) of all deaths and imminent deaths in a timely manner. (CMS §482.45(a)(1))

*Timely is defined as within one hour.

*Imminent death is defined as a mechanically ventilated patient with a devastating neurological injury or insult and missing at least two brain stem reflexes or a Glasgow Coma Scale of 5 or less.

It is Lifebanc's responsibility to determine medical suitability for donation and must evaluate every patient who meets initial criteria for donation. (CMS §482.45(a)(3))

All families are legally entitled to receive accurate and unbiased information about organ, eye and tissue donation from an individual trained in the donation request process. Ideally, the hospital and Lifebanc will work collaboratively to plan the approach; however, the Lifebanc requestor must initiate the request to the family regarding organ, eye and tissue donation. The perception that a family’s grief, race, ethnicity, religion or socioeconomic background would prevent donation should never be used as a reason not to approach a family about donation. (CMS §482.45(a)(3-4))

In an effort to preserve every potential opportunity for organ donation, hospitals are required to maintain a patient hemodynamically until Lifebanc is able to evaluate the potential donor and the donation request can be made to the family. (CMS §482.45(a)(5))

Revised Uniform Anatomical Gift Act (UAGA)

The Revised UAGA, adopted in 2006, governs organ donation for the purpose of transplantation, and it also governs whole body donation in the study of medicine. The law details the forms by which such gifts can be made.

In the absence of an individual’s documented decision regarding an anatomical gift, a surviving spouse, or if there is no spouse, a list of specific relatives in order of preference, can make the gift. The UAGA delineates the order of legally authorized decision makers.

It also seeks to limit the liability of health care providers who act on good faith representations that a deceased patient meant to make an anatomical gift.

The UAGA further requires Medical Examiner cooperation in the donation process and also prohibits the trafficking of human organ donations for transplant or therapy for profit.

Link to the Revised Uniform Anatomical Gift Act (2006)
Ohio Revised Code Sections 2108.01 to 2108.29: http://codes.ohio.gov/orc/2108

Health Insurance Portability & Accountability Act (HIPAA)

HIPAA guidelines exclude all Organ, Tissue and Eye recovery agencies including Lifebanc and Eversight. The procurement or banking of organs, blood (including autologous blood), sperm, eyes or any other tissue or human product is not considered to be health care under this rule and the organizations that perform such activities would not be considered health care providers when conducting these functions. As described in 164.512(h), covered entities are permitted to disclose protected health information without individual authorization, consent or agreement (see below for explanation of authorizations, consents and agreements) as necessary to facilitate cadaveric donation. (65 Fed. Reg. 82571) We delete from the definition of “health care” activities related to the procurement or banking of blood, sperm, organs or any other tissue for administration to patients. We do so because persons who make such donations are not seeking to be treated, diagnosed, and assessed or otherwise seeking health care for themselves, but are seeking to contribute to the health care of others. In addition, the nature of these activities entails a unique kind of information sharing and tracking necessary to safeguard the nation’s organ and blood supply and those seeing to donate are aware that this information sharing will occur. Consequently, such procurement or banking activities are not considered health care and the organizations that perform such activities are not considered health care providers for purposes of this rule. (65 Fed. 82571-82572)

To view the entire Rule, and for other additional helpful information about how it applies, see the OCR website: http://www.hhs.gov/ocr/hipaa.
**Living Donation**

In order to qualify as a living donor, an individual must be in good mental and physical health and be at least 18 years of age. There are many types of living donation, although not every transplant center performs all types of living donation:

- **Non-Directed:** Not related to or known by the recipient, but make their donation as an act of compassion. This type of donation is also referred to as anonymous or altruistic living donation.

- **Paired Donation:** Donor is medically able, but cannot donate a kidney to their intended candidate because they are incompatible (i.e. poorly matched). Paired exchange donation consists of two or more kidney donor/recipient pairs whose blood types are not compatible. The two recipients trade donors so that each recipient can receive a kidney with a compatible blood type. Once all donors and recipients have been tested, the kidney transplant surgeries can be scheduled.

- **Blood Type Incompatible:** Transplant candidate receives a kidney from a living donor with an incompatible blood type. To decrease the risk of rejection of the donated organ, candidates receive specialized medical treatment before and after the transplant.

- **Positive Crossmatch:** A living donor and a transplant candidate who are incompatible because antibodies (a protein substance) in the candidate will immediately react against the donor’s cells, causing loss of the transplant. Specialized medical treatment is provided to the candidate to prevent rejection.

- **Deceased Exchange:** Also called list-paired exchange and living donor/deceased exchange. If a paired exchange cannot be found, living donors in certain areas of the country may be eligible for living kidney donor list exchange. In this type of exchange, a kidney donor who is not compatible with their intended recipient may offer to donate to a stranger on the waiting list. In return, the intended recipient advances on the waiting list for a deceased donor kidney.

For more information about living donation, visit Transplant Living or contact one of the following transplant centers in Northeast Ohio:

- **Cleveland Clinic (Living Kidney Donation and Living Liver Donation)** 800-223-2273

- **University Hospitals Cleveland Medical Center (Living Kidney Donation)** 216-844-3689

- **Alliance for Paired Donation Program**

**Total Body Donation**

A pre-arranged agreement with one of the programs below is often necessary for full body donation to take place. Each program may have different requirements and criteria. For more local information, please contact one of the following programs.

- **Case Western Reserve University School of Medicine:** 216-368-3430 [add hyperlink to program]

- **Cleveland Clinic Body Donation Program:** 216.444.6870, Email: bodydonation@ccf.org

- **Northeastern Ohio Universities College of Medicine Body Donation Program (NEOUCOM):** 24-hour hotline - 1.800.686.2511, ext. 6317

Body donation for medical research and education can also be facilitated through national organizations such as MedCure or Science Care.

Link to body donation programs in the United States: University of Florida State Anatomical Board: [http://old.med.ufl.edu/anatbd/usprograms.html](http://old.med.ufl.edu/anatbd/usprograms.html)
When to Call Lifebanc: Identification & Referral

Who is a Potential Organ Donor?

Only 2% of patients die in a manner that makes organ donation possible. It is crucial that critical care nurses & physicians are familiar with the organ referral criteria so Lifebanc is notified in a timely manner of every potential donor. Please review these criteria for referral, and call Lifebanc when the answer is YES to these three questions, regardless of the patient’s age, medical and social history:

1. Does my patient have a neurological injury? [anoxia, cerebrovascular accident (CVA or stroke), trauma, etc.]
2. Is my patient on mechanical ventilation?
3. Is my patient absent or 2 or more brain stem reflexes: cough, gag, pupils, corneal, pain, breathing over the vent, cold calorics, or vestibulo-ocular reflex (doll’s eyes).

Call Lifebanc Again:

- When physician or family begins to consider end-of-life options
- When brain death testing is discussed or planned
- If patient’s condition changes
- When physician or family discusses a DNR status
- Prior to ANY withdrawal of support

<table>
<thead>
<tr>
<th>When To Call: Three Clinical Triggers</th>
<th>Primary Screening Info</th>
<th>Secondary Screening Info</th>
<th>When To Call Back</th>
</tr>
</thead>
</table>
| Please call within THREE (3) hours when patient meets ALL of the following clinical triggers: | • TIP: Have Face Sheet Ready  
• Admission diagnosis, admission course, past medical history, current neurological function, brain stem reflexes. | • Most recent lab values; current medications: sedation, pain medications, paralytics, vaso-pressors, antibiotics; vital signs; code status; hospital/family plans.  
• If patient is ruled out for organ donation by Lifebanc: Call back with cardiac time of death.  
• Lifebanc on site: Lifebanc will perform a thorough chart review and confer with the healthcare team. | 1. Brain death testing is planned  
2. Physician or family begin to consider end of life options:  
Withdrawal of ventilator and/or medical support (deceleration of care)  
3. If patient condition decompensates  
4. Physician or family discusses DNR status  
5. Prior to ANY withdrawal of support. |
Brain Death or Death by **Neurological Criteria**

In a healthy body, the organs and the brain are supplied with oxygen-rich blood. The brain must have a good supply of this oxygen-rich blood in order to function. There are two ways a patient may die:

1. **Cardiopulmonary (or cardiac) death**, when the heart stops beating and breathing stops

2. **Brain death**

If the brain is damaged due to a severe head injury, stroke or if the blood supply to the brain is stopped, it can no longer oversee the body’s functions. The brain has multiple cells, each one with a specific function. Once a brain cell dies, it cannot be repaired or replaced.

If there is enough damage to the brain because of a lack of blood supply, the brain dies. It can never work again. Brain death is not reversible. If all tests show the brain is no longer functioning, the patient has died.

**Determination of Brain Death**

A physician who is not part of the transplant team performs specific examinations to determine whether brain death has occurred. This testing process may take several hours. After the absence of brain activity is determined, the diagnosis of brain death is confirmed. Once someone has been declared brain dead, there is no chance for that individual to recover.

**Time of Death**: The legal time of death occurs when the physician declares the patient brain dead.

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**Organ and Tissue Donation Options**

<table>
<thead>
<tr>
<th>Brain Death or Death by Neurological Criteria</th>
<th>Donation after Circulatory Determination of Death (DCDD)</th>
<th>Cardiac Arrest</th>
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</thead>
<tbody>
<tr>
<td>Organ donor</td>
<td>Organ donor</td>
<td>Tissue &amp; Eye donor</td>
</tr>
<tr>
<td>• Irreversible, non-survivable brain injury.</td>
<td>• Irreversible, non-survivable brain injury.</td>
<td>• Patient is not currently on a ventilator.</td>
</tr>
<tr>
<td>• Patient currently maintained on a ventilator.</td>
<td>• Patient currently maintained on a ventilator.</td>
<td>• No cardiac or respiratory activity.</td>
</tr>
<tr>
<td>• Brain death or death by neurological criteria is declared via clinical exam (testing all brain stem reflexes, apnea test) and/or other ancillary testing (EEG, cerebral perfusion scan, transcranial doppler).</td>
<td>• Patient does not meet to brain death criteria.</td>
<td>• Patient has an indication of donor status (first-person consent) or legal next of kin provides authorization/consent.</td>
</tr>
<tr>
<td>• Patient has an indication of donor status (first-person consent) or legal next of kin provides authorization/consent.</td>
<td>• Family decides to withdraw care.</td>
<td>• May donate eyes and tissue such as bone, connective tissue (ligaments and tendons), heart valves, skin and veins/vessels.</td>
</tr>
<tr>
<td>• Organ donors may also donate eyes and tissue.</td>
<td>• Family wants donation to occur.</td>
<td></td>
</tr>
</tbody>
</table>
Brain Death Exam

Research indicates that most families want to be offered the option of observing the brain death exam.

Examples of supportive language that enhance family understanding of brain death:

1. “Some families find it helpful to watch the tests that we do to determine if there is any activity left in the brain. Would you like to be present for the examination?”

2. “I have checked to be sure that there is nothing that could interfere with the patient’s ability to respond (temp, labs, meds.)”

3. Explain possible spinal reflexes: “Sometimes we see movement. Our goal is to differentiate between purposeful movement that originates in the brain, and reflexive movement that originates in the spinal cord.” (Examples of reflexive movement: knee reflex when tapped with doctor’s hammer or pulling away hand from a hot stove.)

4. I am going to provide several types of stimulation to see if he responds:
   a. Corneal: I am going to touch his eye with the tip of this Q-tip. The normal response is a blink.
   b. Pupillary: I am going to shine a light in his eyes. The normal response is for the pupil to get smaller.
   c. Cough: I am going to suction him deeply. The normally response would be a cough.
   d. Gag: I am going to place this in the back of his throat. The normal response is to gag.
   e. Pain: I am going to provide a painful stimulation to see if I can elicit any response. Even people in a very deep coma would respond to this type of stimulation.
   f. Occulocephalic (Doll’s Eyes): I am going to turn his head. It is abnormal for his eyes to turn with his head.
   g. Occulovestibular (Cold Calorics): I am going to flush his ears with cold water and observe to see if his eyes move at all. Again, even someone in a deep coma will have eye movements in response to this. No eye movement means that his brain is not working.

5. We are now going to proceed with the apnea or breathing test. We are going to turn off the ventilator and see if he initiates any breaths on his own. At the end of the test, we will draw some blood and turn the ventilator back on. Would you like to stay in the room to observe this test?
   a. If at any time his blood pressure or oxygenation drops significantly, we will stop the test and restart the ventilator.
   b. I am going to uncover his chest so we can closely watch to see if he takes any breaths.
   c. It is important not to touch him or the bed as we will be watching closely for any breathing.
   d. It will take several minutes to get the results back from this test. (Team member) is going to take you to the conference room. I will join you when I get the test results.

References:

Apnea Testing in Accordance with Lifebanc Guidelines

Please note this is a Lifebanc description of an apnea test. Most hospitals have their own policies regarding brain death pronouncement which will include a description of an apnea test and the specifications to which the hospital wishes employees to perform these tests. As a hospital employee, all policies regarding brain death pronouncement should be followed.

1. Obtain baseline ABG. Always assure starting pH and PCO$_2$ are within normal limits.
2. Pre-oxygenate with 100% O$_2$ for 30 minutes prior to start of apnea test.
3. Disconnect patient from ventilator. Insert cannula or suction catheter at level just above carina to administer O$_2$ at 8-10 liters/minute.
4. Always observe patient for any respiratory effort or hemodynamic instability.
5. If the patient is able to remain off of the ventilator for 10 minutes without taking a breath and has remained hemodynamically stable, obtain final ABG at 10 minutes post start time of test.
6. After final ABG is drawn place patient back on ventilator on previous settings.

7. A positive apnea test (or one which would indicate brain death), would mean the PCO2 needs to rise by 20 torr or result above 60 mmHg in conjunction with no spontaneous respirations.

**BRAIN DEATH CHART DOCUMENTATION**

When the physician has made a brain death diagnosis, he or she should document the following information in the Progress Notes on the patient’s medical record:

- Tests performed and the response or lack of response, to include pre- and post-blood gas results from apnea test.
- Results of any diagnostic studies.
- Date and time of death.
- Signature of declaring physician.

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**Brain Death Documentation Sample:**

**February 22, 2017**

Thirty-five year old Caucasian female, admitted February 20, 2017, with massive sub-arachnoid hemorrhage. The patient has normal temperature, vital signs and oxygen saturations and is not on any medications at doses that would mimic the findings of brain death.

**Clinical examination performed as follows:**

- ✓ No response to painful stimuli.
- ✓ No corneal, cough, or gag reflex present.
- ✓ No response to cold caloric.
- ✓ No response to doll’s eyes.
- ✓ Apnea test performed; patient without spontaneous respiratory effort; pCO2 drawn before start of apnea test, and pCO2 drawn after 10 minutes of apnea or drawn earlier if patient becomes hemodynamically unstable.

Previous examination performed at 8:00 p.m. on February 21, 2017 also indicated brain death. Patient pronounced dead at 9:30 a.m. on February 22, 2017. Family made aware of diagnosis. Lifebanc to discuss option of donation with the family. Coroner notified.

John Doe, MD.

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**DNC: Death by Neurological Criteria**

Portal to the Cleveland Clinic Center for Online Medical Education and Training (COMET) - [https://www.cchs.net/online-learning/cometvs10/dncPortal/default.htm](https://www.cchs.net/online-learning/cometvs10/dncPortal/default.htm)

The portal gives you access to the Death by Neurological Criteria (DNC) course, which explains how to properly assess evidence of cerebral function in patients in a coma. It outlines the accepted medical standards for determining DNC and details the elements included in the clinical examination.

The course provides the tools to effectively diagnose a patient dead by neurological criteria. It also gives you information about how to properly discuss DNC with the families of your patients.
Donation After Circulatory Determination of Death (DCDD)

Donation After Circulatory Determination of Death (DCDD) occurs when a ventilator-dependent patient has a non-survivable brain injury and does not progress to brain death. If the legal next of kin decides to withdraw ventilator support, the patient may still be considered for organ donation after cardiac death.

We have assembled tools such as the Critical Pathway for the DCD Donor, DCD Process, DCD Frequently Asked Questions and the History of DCD to help you with these cases. Lifebanc also has created a sample Hospital Policy, as well as an in-service for DCD. Both are available to all hospitals through your Lifebanc Representative.

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO), released Revisions to Standard LD.3.110 that require all hospitals to have an organ donation policy that addresses opportunities for asystolic recovery/Donation after Circulatory Death (DCD). Lifebanc’s DCD protocol will allow

### Critical Pathway

<table>
<thead>
<tr>
<th>Collaborative Practice: The following health care professionals may be involved in the Donation After Circulatory Death (DCD) donation process:</th>
<th><strong>Phase I: Identification &amp; Referral</strong></th>
<th><strong>Phase II: Preliminary Evaluation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Physician (MD)</td>
<td><strong>the RN should call Lifebanc at 800-558-5433 when:</strong></td>
<td></td>
</tr>
<tr>
<td>• Critical Care RN</td>
<td>Family meeting is planned, family is considering withdraw of care or the decision to withdraw care has been made AND The patient is on a ventilator with both of the following:</td>
<td></td>
</tr>
<tr>
<td>• Nurse Supervisor</td>
<td>1. A neurological injury such as a CVA, head trauma, or anoxia.</td>
<td></td>
</tr>
<tr>
<td>• Medical Examiner/Coroner</td>
<td>2. Absence of at least two (2) brain stem functions:</td>
<td></td>
</tr>
<tr>
<td>• Respiratory Therapy (RT)</td>
<td>• Cough</td>
<td></td>
</tr>
<tr>
<td>• Anesthesiology</td>
<td>• Gag</td>
<td></td>
</tr>
<tr>
<td>• OR/Surgery Staff</td>
<td>• Pupils</td>
<td></td>
</tr>
<tr>
<td>• Clergy</td>
<td>• Corneal</td>
<td></td>
</tr>
<tr>
<td>• Social Worker</td>
<td>• Pain</td>
<td></td>
</tr>
<tr>
<td>• The RN should call Lifebanc at 800-558-5433 when: Family meeting is planned, family is considering withdraw of care or the decision to withdraw care has been made AND The patient is on a ventilator with both of the following: 1. A neurological injury such as a CVA, head trauma, or anoxia. 2. Absence of at least two (2) brain stem functions: • Cough • Gag • Pupils • Corneal • Pain • Breathing over the vent • Cold calorics • Vestibulo-ocular reflex (doll’s eyes)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Physician
- Has communicated grave prognosis to the family
- Is supportive of withdraw of care.

### Family
- Has received grave prognosis
- Understands prognosis
- Has made the decision to withdraw support
some individuals who are being removed from ventilator support, but who do not meet brain death criteria, the option to donate organs.

Always call the Lifebanc Donor Referral Center at 800.558.LIFE (5433) and request to speak to a clinical coordinator before any withdrawal of support from a patient who meets the three clinical triggers.

### Phase iii: Family Discussion & Consent
- Provide the family with hospital supportive services
- If it is determined that the referred patient may be a candidate for DCDD and the family has made the decision to withdraw care, an FSL from Lifebanc can be introduced to the family by the physician or RN.
- An FSL will offer the option of donation after cardiac death to the legal next-of-kin (LNOK)
- FSL will fully explain the DCDD processes
- FSL obtains a witnessed consent from LNOK for DCDD.
- FSL obtains a detailed medical and social history
- PTC or FSL will discuss changing the DNR status with LNOK and the physician in order for the hospital to continue providing care.

### Phase IV: Comprehensive Evaluation & Donor Management
- To be considered for transplant, organ function must be optimized.
- Medical management goals are to obtain and/or maintain homeostasis:
  - Hemodynamics
  - Lab values
  - Temperature
  - Oxygenation
  - Urine output
- Medical management of the patient remains the responsibility of the attending physician and hospital team.
- P TCs will remain in the ICU to collaborate with the MD, RN and RT to optimize organ function and coordinate the donation process.
- For evaluation of the organs PTC will perform a thorough physical assessment and may request multiple blood draws for lab work or other diagnostic testing.

### Phase V: Withdrawal of Support/Pronouncement of Death/Organ Recovery
- OR staff will be notified and the DCDD process and requirements discussed
- Will the family be present in the OR after withdraw of care until cardiac time of death?
- Identify a physician to accompany the patient to OR and remain present throughout the withdraw of care to provide comfort care and pronounce death.
- Discuss holding ICU bed/room should the donor not sustain cardiac arrest after withdraw within the required timeframe.
- Discuss medications to be administered as part of the end of life care plan.
- Discuss OR room setup and withdraw of care plans with RN, RT, pronouncing MD and OR staff.
- It will be required for the donor to be connected to OR monitors so the PTC can monitor oxygenation and hemodynamics.
End-of-Life Discussions and the Role of the Lifebanc Family Support Liaison

Donation and the Family

Perception that a family’s grief, race, ethnicity, religion or socioeconomic background would prevent donation should never be used as a reason not to approach a family - CMS §482.45(a)(4).

A Lifebanc Coordinator will be dispatched to the hospital to collaborate with the healthcare team in developing a plan to approach the family about donation. The family should only be approached with a request for consent for donation after one of the following situations:

1. Brain death has been pronounced and they are understanding of the diagnosis.
2. The decision to discontinue mechanical ventilation has been made and it has been determined that the patient is a candidate for Donation after Circulatory Death (DCD).
3. They request to speak with someone about donation.

Requesting Authorization

Any individuals involved in a request for organ, tissue, and eye donation must be formally trained in the donation request process. Ideally, the OPO and the hospital will decide together how and by whom the family will be approached - CMS §482.45(a)(3).

Collaborative requesting by the OPO and hospital staff is a national best practice and allows families to make a decision about donation in the most informative, trusting and compassionate environment possible. Research shows that authorization for donation is highest when families are given time to understand and accept their relative’s death before the organ donation request is made (decoupling).

End of Life Discussions When Organ Donation is an Option

All potential donor families must be approached and informed of their donation rights - CMS §482.45(a)(3).

Hospital must ensure that potential donors are maintained in a manner that maintains the viability of their organs - CMS §482.45(a)(5).

Sometimes the topic of organ donation comes up as families begin to understand the grave prognosis of their loved one. There may also be times when a physician mentions organ donation during an end of life discussion. Families may express disinterest in donation initially based on pre-existing misinformation, misperceptions and/or from an overall lack of information. In the interest of empowering families to make a truly informed decision, a Lifebanc designated requestor is required to approach the family. Suggested language to use if the family reacts negatively to the preliminary mention: “I understand this is a lot to take in when you have only just heard about your loved one’s condition. But it is important to have all of the information so you can make a truly informed decision about donation, just as you did when making decisions for his/her medical care.”

Family Has Made the Decision to Discontinue Mechanical Ventilation

Notify Lifebanc as soon as possible if family may be ready to make end of life decisions to ensure their opportunity for donation is preserved while minimizing delays in other end of life plans. Although not ideal, in some cases, the request for donation can occur by Lifebanc via telephone if necessitated by the family’s time constraints. Suggested language to use when a family wants to discontinue mechanical ventilation and/or supportive medications and Lifebanc is not yet at the hospital: “Lifebanc is a source of information for you about donation, and it is vital to hear from the experts in the field when making this or any other important family decision.”
Lifebanc Family Support Liaisons are specifically trained to help with these discussions, as well as facilitating the donation process for the family. Request for authorization/consent will be carried out by the Family Support Liaison at Lifebanc.

Authorization and the Medical Social History Interview

The Lifebanc Coordinator will complete the Authorization for Anatomical Gift and Release or the Disclosure for Organ/Tissue/Eye Donation for registered donors with the legal next of kin. In addition, a medical social history interview, known as the Donor Risk Assessment Interview (DRAI) is completed. The appropriate person to interview for the Donor Risk Assessment Interview will generally be the next of kin; however, it may be necessary to interview other family members or friends in an effort to gain the most knowledgeable historian. In the absence of a complete history, the donor will be considered “increased risk” for organ donation. The DRAI is conducted in a confidential, sensitive, and professional manner.

The purpose of conducting the DRAI, physical assessment and serological tests is to prevent the transmission of infectious diseases through organ/tissue/eye transplantation. Information regarding specific high-risk behavior is clearly documented and communicated to all potential transplant centers.

PLEASE DO NOT APPROACH A FAMILY ABOUT THEIR DONATION OPTIONS.

The Lifebanc Family Support Liaison’s role in the donation process is to:

- Provide crisis intervention to families experiencing unexpected traumatic loss
- Participate in the brain death testing and conversations about brain death
- Participate in the end-of-life discussions with families
- Facilitate the informed consent process
- Support the family regardless of their decision
- Provide follow-up information to the family
- Support the hospital staff in providing family care
**Best Practices: Donation Conversation**

1. Early involvement of the Lifebanc Family Support Liaison (FSL) prior to brain death testing and pronouncement allows them to:
   a. Assess the family’s need for crisis intervention and support
   b. Provide support to the hospital staff
   c. Assess the family member’s understanding of the patient’s prognosis

2. Attendance by the Lifebanc Family Support Liaison (FSL) during the brain death discussion allows the FSL to:
   a. Hear what the medical team has told the family and keep the message consistent
   b. Assess the family’s understanding of brain death
   c. Be utilized as a resource should the family or the medical team bring up donation

3. A collaborative approach. At the time of the initial donation conversation, participation by hospital staff is welcomed and encouraged. This collaborative approach provides:
   a. The family with the knowledge that health care team has asked Lifebanc to speak with them
   b. The family with a health care team representative should the family still have regarding the patient’s care or diagnosis
   c. The hospital staff the opportunity to hear the family’s response to donation
   d. Observe how the Family Support Liaison is interacting with the family

**Organ Donor Management**

Once brain death has been confirmed and consent is obtained for donation, Lifebanc assumes care of the donor patient at this point, therefore all orders are written under the care and direction of Lifebanc’s Medical Director. Lifebanc estimates the length of time for a donation case from consent time to completion of OR to be from 24 to 72 hours. The time frames vary and are case specific.

---

**Lifebanc Donor Management Goals**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Reference Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Rate (HR)</td>
<td>55 - 125 bpm</td>
</tr>
<tr>
<td>Mean Arterial Pressure (MAP)</td>
<td>65 - 110 mmHg*</td>
</tr>
<tr>
<td>Central Venous Pressure (CVP)</td>
<td>4 - 12 mmHg during conventional ventilation 4 - 15 mmHg during inverse ratio ventilation</td>
</tr>
<tr>
<td>Ejection Fraction (EF)</td>
<td>≥ 50%</td>
</tr>
<tr>
<td>Pulse Pressure Variation (PPV)</td>
<td>4&lt; 13%: Unlikely to be preload responsive &gt; 15%: Likely to be preload responsive</td>
</tr>
<tr>
<td>Stroke Volume Variation (SVV) %</td>
<td></td>
</tr>
<tr>
<td>Vasopressors</td>
<td>&lt; 1 vasopressor</td>
</tr>
<tr>
<td>Sodium (Na+)</td>
<td>135 - 155 mEq/L**</td>
</tr>
<tr>
<td>Urine Output (UO)</td>
<td>0.5 - 4 ml/kg/hr**</td>
</tr>
<tr>
<td>Urine Output</td>
<td>Minimum 0.5 cc/kg/hr</td>
</tr>
<tr>
<td>Temperature (T)</td>
<td>96 - 100°F / 36.0 - 37.8°C</td>
</tr>
<tr>
<td>Hemoglobin/Hematocrit</td>
<td>&gt; 7.0 gm/dL / 21%</td>
</tr>
<tr>
<td>Glucose</td>
<td>80 - 180 mg/dL</td>
</tr>
<tr>
<td>pH</td>
<td>7.30 - 7.45</td>
</tr>
<tr>
<td>P/F Ratio (PaO2/ FiO2)</td>
<td>≥ 350</td>
</tr>
<tr>
<td>SPO2</td>
<td>&gt; 92%</td>
</tr>
<tr>
<td>Lab Values</td>
<td>Within Normal Limits (WNL)</td>
</tr>
<tr>
<td>Creatinine</td>
<td>&lt; 1.2 mg/dL or &lt; 1.5 mg/dL in ESRD</td>
</tr>
</tbody>
</table>

* If donor has a history of Hypertension (HTN), MAP goals are 70 - 110 mmHg.
** Differs from Donor Management Goals (DMGs): Na+ ≤ 155 mEq/L, UO > 0.5 ml/kg/hr.
Respiratory Therapist’s Role

The respiratory therapist’s role is to provide any medication, equipment and services requested/ordered by the onsite procurement staff. Please keep in mind all of these orders help to facilitate the donation process. Lifebanc recognizes the large volume of work a donation case creates for respiratory therapists, but with your help we may be able to save one or two more lives from a donor’s generous gift.

What therapies are usually needed during a typical donation case?

• Frequent ventilator changes - often inverse PCV or APRV modes.
• Standard Q4 ABGs
  (may become more frequent with vent changes)
• Q2-Q4 aerosol or MDI therapy
• Q2-Q4 vest therapy/CPT
• May need to assist with bedside bronch
• Assist with repositioning of patient
  (prone positioning is sometimes indicated)
• Maintain good pulmonary hygiene
• Maintain mechanical ventilation during all patient transports (CT, cath lab, OR) ideally remaining on the patient’s ICU vent. Minimize ventilator disconnections to maintain recruitment of alveoli.
• Assist with or provide equipment for re-intubation to a 7.5 or larger ETT
• If the patient is to be a lung donor the RT will assist in transporting the donor on the ICU ventilator to the OR. It is preferable for a lung donor to remain on the ICU vent in the OR. The PTC may require the assistance of an RT in the OR.

Donor Pulmonary Management Goals:

**ABG Reference Range**

*These do not represent the range of normal values but rather the range of acceptable values for the brain dead donor. Values outside of these ranges should be corrected.*

<table>
<thead>
<tr>
<th>ABG</th>
<th>Acceptable Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.30 - 7.45</td>
</tr>
<tr>
<td>PaO2</td>
<td>80 - 100 mmHg w/ FiO2 &lt; 25%</td>
</tr>
<tr>
<td>PaCO2</td>
<td>35 - 45 mmHg</td>
</tr>
<tr>
<td>HCO3</td>
<td>22 - 26 mEq/L</td>
</tr>
<tr>
<td>SPO2</td>
<td>&gt; 92%</td>
</tr>
</tbody>
</table>

• Lifebanc prefer donors be in the acceptable acidic range because RBCs then have less affinity for oxygen and more readily release their oxygen for availability to the organs.

**Ventilation Targets**

*These represent the ventilation targets for lungs to be considered for transplant while on conventional ventilator settings.*

<table>
<thead>
<tr>
<th>Measures</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tidal Volume (Vt)</td>
<td>6 - 8 ml/kg of IBW</td>
</tr>
<tr>
<td>Peak Inspiratory Pressure (PIP)</td>
<td>&lt; 25 cmH2O</td>
</tr>
<tr>
<td>Mean Airway Pressure (MAP)</td>
<td>&lt; 15 cmH2O</td>
</tr>
<tr>
<td>Plateau Pressure</td>
<td>&lt; 25 cmH2O</td>
</tr>
<tr>
<td>Positive End Expiratory Pressure (PEEP)</td>
<td>5 cmH2O</td>
</tr>
<tr>
<td>P/F Ratio (PaO2/ FiO2)</td>
<td>&gt; 350 while FiO2 100%</td>
</tr>
<tr>
<td>FiO2</td>
<td>Wean as low as 25% for SPO2 92%</td>
</tr>
</tbody>
</table>
Operating Room Requirements

Scheduling the OR
Following the donor management and organ allocation phases, the Lifebanc Procurement Transplant Coordinator (PTC) will coordinate transfer to surgery with operating room and anesthesia personnel. The PTC will notify the operating room and anesthesia personnel of the donor recovery early in the process.

The hospital personnel needed for an organ recovery includes a circulating nurse, surgical technologist and a CRNA or anesthesiologist.

In order to accommodate the entire organ recovery team, Lifebanc suggests using the largest available OR. The approximate OR time for a multiple organ recovery procedure is 3 to 5 hours.

The Lifebanc Procurement Transplant Coordinator will arrange for a pre-OR huddle for all staff involved prior to the start of organ recovery.

Organ Recovery
The Lifebanc Coordinator will provide the circulating nurse with the names of all visiting personnel and the necessary license information from the visiting surgeons to be included in the patient’s medical record. The hospital staff should document according to hospital standard of practice and established hospital policy.

OR Organ Recovery Process
- If the patient is to be a lung donor the RT will assist in transporting the donor on the ICU ventilator to the OR. It is preferable for a lung donor to remain on the ICU vent in the OR. The PTC may require the assistance of an RT through OR.
- If the patient is not a lung donor the patient may be removed from the ventilator, bagged to OR, and connected to anesthesia’s ventilator.
- The patient is transferred to the OR table and prepped and draped in the normal fashion.
- Anesthesiologist or CRNA monitors and maintains donor hemodynamics and oxygenation with direction from transplant surgeons and PTC.
- Long midline incision is made from the suprasternal notch to the pubic symphysis.
- Median sternotomy is performed with chest retractor placement.
- Organs are dissected in situ then the aorta is cross-clamp and preservation fluid is instilled.
  - Uninterrupted, large volume (up to 12 liters) suction must be readily available.
- Back table organ anatomy information is obtained and the organs are packaged for transport to the transplant centers where the recipients wait.
- After the organs are recovered: the incision is closed, recovery teams and SORCs will leave, and the PTC will assist the OR staff in providing typical post-mortem care.
Organs are recovered in this order due to the timeframe in which each must be transplanted into the recipient:

<table>
<thead>
<tr>
<th>Approximate time frame from recovery to transplant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Heart: 4-6 hours</td>
</tr>
<tr>
<td>2. Lungs: 4-6 hours</td>
</tr>
<tr>
<td>3. Liver: 12 hours</td>
</tr>
<tr>
<td>4. Pancreas: &lt;12 hours</td>
</tr>
<tr>
<td>5. Small Bowel: &lt;12 hours</td>
</tr>
<tr>
<td>6. Kidneys: 30 hours in cold storage or 48 if maintained on pulsatile perfusion pump</td>
</tr>
</tbody>
</table>

The procurement of tissue and corneas may follow the organ donation procedure, and may or may not require the continued use of the operating room suite. The recovery of tissue and corneas does not require the participation of hospital operating room personnel.

**Moment of Honor**

A Lifebanc staff member will ask to take a moment to honor the donor for their gift of life. This is usually done immediately after the OR staff’s time out while all work is at a pause.

**Sample language:** “Today we share a common space and join in a common cause. Through the caring touch of our hearts and hands, we join our efforts to care for (patient name), and for all who benefit from this gift of life. For all the children, grandchildren, friends and family who are touched by what we do here today, may we remember that fresh hopes and dreams began with the gift of this one person. May we take a moment now in silence to honor the life of (patient name).”

**Anesthesia Guidelines**

The donor should have at least one central and/or two large bore peripheral IV lines for rapid fluid replacement.

- Anesthesiologist or CRNA monitors and maintains donor hemodynamics and oxygenation with direction from transplant surgeons and PTC.
- The Anesthesiologist or CRNA will be provided a copy of Lifebanc’s Anesthesia Guidelines.
- After completion of the anesthesia record the PTC will require a copy for the transplant teams.
- Maintain B/P > 90 systolic and CVP 8-10 with crystalloids and colloids.
- Maintain vasopressors/other continuous intravenous infusions already utilized by Lifebanc procurement staff prior to entering the OR.
- Heart rate between 70-120.
- Maintain urine output 1-4 cc/kg/hr. May need to replace urine output cc/cc until ureters are cut.
- Keep FiO2 at 100% for maximum oxygenation unless indicated otherwise by the recovering surgeons.
- Oxygen delivery rates for the donor must be documented on the anesthesia record.
- You may be asked to inflate or deflate the lungs at various times during the organ recovery.
- Routinely, Pavulon or other neuromuscular blocking agent is given to relax abdominal muscles or neutralize spinal reflexes. Please give upon arrival to the OR and prior to the initial incision.
- You may be asked to draw several tubes of blood before Heparin is given.

**Have Available:**

- 8-15 Liters of crystalloids; LR is preferred unless otherwise specified by the Lifebanc Coordinator or recovering surgeon.
- Pavulon.
- Dopamine or other vasopressive agent(s).
- Betadine solution.
- Maintain and complete the anesthesia record. The original should remain in the donor’s hospital chart and a copy should be given to the Lifebanc coordinator who will place it with the Lifebanc donor chart.
- The record must document blood pressure, fluid volume, any organ perfusion and fluid replacement utilized for excessive loss.
- Routine drugs supplied by Lifebanc include: Heparin 30,000 units. Occasionally, additional medications may be requested.
- The administration of all medications must be documented on the anesthesia record.
- PRBC’s on hold. The Lifebanc coordinator will be responsible for ascertaining the availability of blood or other products.
- Pancreas and/or small intestine donor: Betadine may be required NG and then the NG will be clamp.

Pancreas and/or small intestine donor: Betadine may be required NG and then the NG will be clamp.
Lifebanc Will Provide:

For organ donors:

- Heparin 10,000-30,000 units, to be given IV approximately 5 minutes prior to cross clamping; the recovering surgeon will request.

Sequence of Events During Multiple Organ Recovery Procedures:

- Usually, the abdominal team begins the dissection with the heart/lung team present to do an initial gross examination. The abdominal team may begin initial dissection prior to arrival of thoracic teams.

- Some Lung teams may need to perform limited special procedures specific to their individual protocols (i.e. Bronchoscopy, etc).

- After the abdominal dissection is complete, the other teams are invited back to the field to complete their dissections, and all is readied for the aortic cross-clamp to be applied.

- You will be directed to give the heparin, and the aorta will be cannulated. You may be asked to “pull back” any central lines before the aortic cross-clamp is applied.*

- At the appropriate time after the cross-clamp is applied, you will be asked to discontinue support. At this time you may turn off the ventilator and the anesthesia machine, disconnect the lines to the endotracheal tube, and turn off all drips and monitors.

- After the anesthesia record is completed, the Lifebanc Coordinator will request a copy.

* Lung donors need to have ventilation maintained after cross-clamp for a short period of time.

Organ Donation Surgical Supplies

A breakdown of usual instrumentation is below, although needs vary according to the organs recovered and patient’s size. The teams are flexible about instruments and available supplies.

- Prep: Dura Prep or Chloraprep (Chin to thigh)
- 2 - 3 Additional IV Poles in Room
- Sponges: Laps x25. No Radiopaque 4x4s
- Gowns: Determined at time of recovery; a general rule of thumb is to have an assortment of sizes available and reinforced gowns preferred
- Gloves: determined at time of recovery
- Drapes: Abdominal Lap Sheet (disposable) or Chest Sheet with Down sheet
- 15 towels (5 border draping) Long Large Iowan
- Laparotomy Pack: Additional Large Basin
- Heart: Add 2 Basins, Table & Cover
- Lungs: Add 2 Basins, Table & cover
- 2 Back tables: one for abdominal organs and one for thoracic organs
- Suction: Two (Yankauer & Poole Tips) Extra suction Canisters; Neptune suction if available
- Sterile slush machine: a good rule of thumb is to have the slush machine making slush once the room has been set-up prior to the arrival of the donor.
- Knives: #10, #11, #15-on #3 handles
- Suture Ties: #0Silk30in 2-0Silk30in 4-0Silk30in
- Needles: 2 -0 Silk Pop-Offs Sh-1
- 4-0 Prolene BV - 1 4-0 PDS - 2.0 Chromic Gut
- Hemoclips: Medium & Large
- Umbilical Tape x 4
- Bone wax

Instruments:

- Open Exploratory Laparotomy tray
- Sternal Saw
- CV tray
- Lacrimal probes

Specials:

- 2 - 10" Needle Holders
- 1 - 10" Vascular Right Angle
- 1 - 10" Regular Right Angle
- 2-8" DebakeyForceps
- 2-10" DebakeyForceps
- 4-Cooley Scissors 4 pair
- 2-7" CV Mayo Scissors
- 2-7" Mets Scissors
- 1-10" CV Mayo Scissors
- 1-10" CV Mets Scissors
- 1-13" CV Aortic Clamp
- 1-3" Deaver Retractor
- Chest Retractor - Cooley
- 4-Large Towel Clips
- Auto suture

Please know that our recovery team is available to you and your team and can provide education and answers to any questions.
# Facts About Tissue and Eye Recovery Process

<table>
<thead>
<tr>
<th>Tissue</th>
<th>What Tissue is Procured</th>
<th>Where Will the Procurement Take Place?</th>
<th>How is the Procurement Performed</th>
<th>What Will the Tissue Be Used For</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart for Valves</td>
<td>Entire heart, aortic, mitral or pulmonic valve(s) will be excised. Heart muscle may be used for research. Generally only two valves can be excised due to available patch material.</td>
<td>In the operating room</td>
<td>The chest is opened using the same surgical technique employed for cardiac surgery. The heart is sterilely recovered and sent to a tissue processor for further processing. A pathology review is done on every heart after the grafts are removed. A pathology report and slides are available for coroners upon request.</td>
<td>Aortic and mitral valve replacement. Pediatric Valve Replacement. Women of child bearing years. Pulmonary outflow tract reconstruction: Complex Tetralogy of Fallot. Truncus Arteriosus. Pulmonary Arteries.</td>
</tr>
<tr>
<td>Pericardium</td>
<td>Entire pericardium (sac around heart) is removed before heart valves.</td>
<td>In the operating room</td>
<td>The chest is opened using the same surgical technique employed for cardiac surgery. The pericardium is sterilely removed from the heart and sent to a tissue processor for processing.</td>
<td>Tissue can be used in Pulmonary Outflow Tract Reconstruction, Lung Volume reduction surgery, or dura patches.</td>
</tr>
<tr>
<td>Bone &amp; Connective Tissue</td>
<td>Femur, Tibia, Fibula, Iliac Crest/Hemipelvis, Humerus, Radius, Ulna, Connective Tissue</td>
<td>In the operating room</td>
<td>A sterile field is created/normal O.R. technique is used. A lateral incision is made and the entire bone segments are removed, cultured and wrapped. A prosthetic device is inserted and the incision is closed. No disfigurement is caused by the donation of bone.</td>
<td>Connective tissue is used for joint reconstruction. Bone is used to replace tissue lost or damaged by degeneration, trauma or disease. Bone powder, small segments or entire bones may be transplanted.</td>
</tr>
</tbody>
</table>
| **Skin** | Split Thickness: a thin layer of skin is removed from the torso area, abdomen and thighs.  
Full Thickness: a thicker layer of skin is recovered from the back and thighs. | In the operating room | A dermatome is used to recover split thickness skin. A similar technique for auto transplant is employed. The full thickness skin is a free hand graft. The tissue is placed in a media for transport. The skin can be immediately transplanted or frozen for future use. | Skin acts as a “human bandage” and is a temporary graft. Skin will decrease potential for infection, help to maintain body temperature and decrease fluid loss. Skin can also be used in reconstructive surgeries or to treat chronic wounds. |
|---|---|---|---|---|
| **Saphenous Veins** | The saphenous vein is recovered from each leg | In the operating room | A lateral incision is made on the inner aspect of each leg. The saphenous vein is procured, placed in a preservation solution and sent to a tissue processor. | Indications:  
Re-operative coronary arterial bypass  
Peripheral vascular reconstruction  
Traumatic vascular injury repair |
| **Nerves** | Arm: brachial plexus, radial, median, ulnar, and the musculocutaneous nerve  
Leg: Superficial fibular, deep peroneal, common peroneal, tibial, sural, and the sciatic nerve | In the operating room | A lateral incision is made on the inner aspect of each arm and leg. The nerves are recovered simultaneously with bone and connective tissue. The nerves are cultured and placed in an isotonic solution for transport. | Nerves can be used for cancer patients undergoing tumor removal where the adjacent nerve tissue must also be removed or for children and adults sustaining traumatic injuries to their extremities resulting in loss of nerve function. |
| **Eyes** | Usually, only the cornea is removed. On some occasions the entire globe may be removed | The recovery can take place bedside, in the operating room or in the morgue | The facial area is steriley draped. A speculum is used to open the lid. After the cornea or globe is removed, the space is filled and the eyelid is gently closed. | Cornea transplants are used to restore sight to patients with Keratoconus, corneal abrasions or corneal clouding. Sclera is used to implant Glaucoma filters and facial reconstruction. |
Eye Donation

Age, cataracts, poor eyesight, previous eye surgeries or diseases may not prevent a person from becoming an eye donor. Even cancer does not automatically prohibit eye donation.

Eye Donation is Crucial...

More than 11 million Americans cope with severe vision impairments not correctable by glasses. Eye donation can help restore vision lost by injury, disease or infection, but depends entirely on the gifts of donors; there is no substitute for human tissue. Although the entire eye may be recovered for research and education on conditions such as glaucoma, macular degeneration and diabetic retinopathy, only the sclera and cornea can be transplanted.

Scleral Transplant is...

A life-enhancing surgical procedure. Donated sclera (the white part of the eye) is often used in ocular implantation after enucleation to wrap the synthetic eye. The muscles are then attached to the sclera, allowing the artificial eye to move with the companion eye. Scleral transplantation is also used in eyelid reconstruction and in Glaucoma surgery to cover the Ahmed valve, which is inserted into the eye to reduce intraocular pressure, allowing movement of the eyelids across the implant.

Corneal Transplant is...

Another life-enhancing surgical procedure that replaces a disc-shaped segment of an impaired cornea, the clear tissue covering the front of the eye, with a piece of healthy donor tissue. Nearly 10% of all blinding eye disease may be cured with a corneal transplant.

Corneal Transplant Recipients...

Experience over a 90% success rate of restored vision. The first corneal transplant was performed in 1905, making it the world’s oldest human transplant procedure. Today it is the most frequently performed transplant, restoring sight to approximately 50,000 recipients each year, ranging in age from just a few days to over 100 years.

You can Help Increase Eye Donation by Reporting all Deaths to Lifebanc within One Hour of Asystole.

And be prepared to provide chart/demographic information, including pre-hospital run report, the patient’s SSN, height, weight, available medical history, current diagnosis and time of death. Most importantly, be prepared to provide a phone number for the patient’s Next of Kin as Lifebanc will be contacting them to discuss cornea or eye donation.

If Your Patient is Eligible for Eye Donation...

Below is a revised protocol for eye donor management, along with explanation and rationale, to be provided for nurses and during training sessions. There are two key additional steps - adding saline drops to the eyes and gently taping the eyes closed with paper tape.

Please note: Saline, tape and ice should be applied AFTER family members leave the hospital.

1) Instill two drops of sterile saline solution in each eye
   a. helps keep eyes moist/lubricated,
   b. decreases risk for bacterial invasion or damage to corneal tissue.

2) Close eyelids and gently tape closed with PAPER tape
   a. without tape, eyelids may open leading to chance of infiltrates, or cornea being damaged from exposure to air or direct ice placement,
   b. Paper tape may be placed gently either vertically or horizontally across lid,
   c. DO NOT USE adhesive tape as this can rip eyelid, lashes, brow

3) Elevate head above the heart
   a. decreases blood pooling behind eyes,
   b. use bed controls (30 degrees), a towel roll or pillow.

4) Cool eye and brow area by applying ice to closed, taped eyes
   a. helps decrease swelling, bruising if recovery occurs,
   b. use WET ice (ice cubes and water) placed in rubber gloves,
   c. do not overfill the gloves or place HEAVY bags on eyes, as prolonged placement and pressure on globe can cause damage and impact suitability of tissue for transplant.

5) Move donor body to refrigeration as soon as possible

If you have any questions, please contact Eversight at 216.706.4220.
Bereavement Services for Donor Families

The Bereavement Services Department at Lifebanc offers comprehensive counseling and support services to donor families free of charge. Donor families receive monthly mailings that are aimed to support and educate families on the experiences of grief that they are likely to have. Families receive calls at 2 months and 12 months after their loss so we can be a touch point for their healing on their grief journey. Individual counseling and support groups are offered at the Lifebanc office by a licensed professional clinical counselor and if the family member is unable to come to the office, Skype counseling, phone counseling and even an UBER can be provided within a 20 mile radius of the office. The Bereavement Department offers one time opportunities to be supported as well, such as the Grieving through the Holidays Program or Yoga as A Way to Process Grief. If families prefer to receive their support via the internet, they can join our Donor Family Facebook Support Page that has over 300 members. Lifebanc holds an annual Donor Memorial Service, where families can honor their loved one in a public way, with others who share a similar experience. The Bereavement Department provides the opportunity for organ donor families and recipients to communicate with each other as well as explains the unique circumstances related to correspondence for tissue donor families and recipients. The Bereavement Department can provide general information about the status of recipients to organ donor families and can share information about the status of tissue donated to tissue donor families.
TISSUE AND EYE DONATION
CHECKLIST

800.558.5433  |  24-hour Donor Referral Line

❑ Obtain referral number: ______________________

1) Request for consent will be carried out by the Donor Referral Coordinator at LifeBanc/Eversight. PLEASE DO NOT APPROACH A FAMILY ABOUT THEIR DONATION OPTIONS.

2) For compliance with hospital policy please Call the Lifebanc 24-hour donor referral line within ONE HOUR of asystole (cardiac death)

3) Information needed for routine notification call (Have face sheet/demographics info available):
   ❑ Institution and phone number
   ❑ Referring person’s name, title, and unit
   ❑ Is the patient on a vent?
   ❑ Is there a heart beat?
   ❑ First and last name
   ❑ Race, and gender
   ❑ Age, DOB
   ❑ Weight, or best approximation
   ❑ SS# and Medical Records #
   ❑ Cardiac Time of Death ________/Last Known Alive Time ________ (if event was unwitnessed)
   ❑ Admission- Date and Time__________/_________
   * Any Hx of HIV, AIDS, HBV, HCV or current diagnosis of CA, MRSA or VRE; hx of eye disease/ surgeries *
   ❑ Medical History: Current and Past ______________
   __________________________________________
   __________________________________________
   ❑ Documented Cause of Death- Primary Diagnosis:
   __________________________________________

4) Primary Screening Information: needed if patient meets preliminary criteria for donation.

❑ Current diagnosis of infection confirmed by positive blood cultures, fever, elevated white cell count.

Blood cultures/Dates_______________________________________________

Temperatures/Trends/Dates__________________________________________

WBC/Dates________________________________________________________

Chest XRAY/ Reports/Dats____________________________________________

❑ Secondary Screening Information: needed if basic screening information does not rule out the possibility of donation.

❑ EMS Run sheet if available

❑ Circumstances of death and/or brief hospital course summary-Length of ACLS/ down time

❑ Transfusions and Infusions

Transfusions- Last 48 hours/Amounts/Dates

Infusions- 1 hour prior to death/Amounts/Time

❑ Condition of body
   (tattoos, piercings, wounds, track marks, trauma, etc.)

❑ Medications- prescribed for home:

❑ Antibiotics-Antivirals-Antifungals: ______________________

Additional Information Required:

❑ Availability of next of kin-Please be sure to get the name and phone number where they can be reached within the next hour.

Cell phone: __________________________

Home Phone: _________________________

Alternate phone number: __________________________
Suggested verbiage to family before they leave the hospital:
“Could we please have a phone number where we could reach you within the next hour or so in case the hospital or one of the agencies we work with needs to contact you.”

- If next of kin initiates a conversation about donation, and
  wishes to speak with the coordinator while at the hospital,
  move them to a quiet, private location with a telephone. Notify Lifebanc immediately.

- Unit Fax Number: ________________

- Coroner’s Case?
  (If yes, this is NOT a rule out for donation)

- Doctor signing Death Certificate (Name and phone#)

- Funeral Home, contact and phone number (if available)
  Funeral Home: __________________________
  Contact: ________________________________

- Phone number: __________________________

- Donor Referral Coordinator will inform you of family’s decision and collaborate with you further if consent has been obtained.

- PLEASE DO NOT TRANSPORT THE BODY TO THE CORONER OR FUNERAL HOME UNTIL THE DONOR REFERRAL COORDINATOR NOTIFIES YOU OF THE OUTCOME OR UNLESS OTHERWISE ADVISED

Please be prepared to fax in the patient’s chart if patient is identified as a potential tissue donor

SAVING AND ENHANCING LIVES IS A TEAM EFFORT

THANK YOU FOR YOUR SUPPORT AND COLLABORATION IN THE DONATION PROCESS
Just a Reminder!

HIPAA guidelines permit information sharing with all organ, eye and tissue recovery agencies, including Lifebanc and the Eversight.

Please remember this when being asked to provide patient information during referral phone calls.

The procurement or banking of organs, blood (including autologous blood), sperm, eyes or any other tissue or human product is not considered to be health care under this rule and the organizations that perform such activities would not be considered health care providers when conducting these functions. As described in 164.512(h), covered entities are permitted to disclose protected health information without individual authorization, consent or agreement (see below for explanation of authorizations, consents and agreements) as necessary to facilitate cadaveric donation. 65 Fed. Reg. 82571.

We delete from the definition of “health care” activities related to the procurement or banking of blood, sperm, organs or any other tissue for administration to patients. We do so because persons who make such donations are not seeking to be treated, diagnosed, assessed or otherwise seeking health care for themselves, but are seeking to contribute to the health care of others. In addition, the nature of these activities entails a unique kind of information sharing and tracking necessary to safeguard the nation’s organ and blood supply, and those seeking to donate are aware that this information sharing will occur. Consequently, such procurement or banking activities are not considered health care and the organizations that perform such activities are not considered health care providers for purposes of this rule. 65 Fed. Reg. 82571-82572.

DRC 2A Revised 11/15/11

The Joint Commission has approved revisions to standard LD.3.110 that address organ procurement and donation.

These revisions, effective January 1, 2007, are applicable to critical access hospitals and hospitals.

Revisions to the standard are shown in the box below with underline indicating new text and strikethrough indicating deleted text.

A5. [Hospital only] In Department of Defense hospitals, Veterans Affairs medical centers, and other federally administered health care agencies, this notification is done according to procedures approved by the respective agency.

A6. [Critical Access Hospital, Hospital] The OPO determines medical suitability for organ donation and, in the absence of alternative arrangements by the organization, for tissue and eye donation.

A7. [Critical Access Hospital, Hospital] The organization has Procedures, developed in collaboration with the designated OPO, for notifying the family of each potential donor of the option to donate—or decline to donate—organs, tissues, or eyes.

A8. [Critical Access Hospital, Hospital] This Notification is made by an organ procurement representative or the organization’s designated requester.

A9. [Critical Access Hospital, Hospital] Written documentation by the organization’s designated requester shows indicates that the patient or family accepts or declines the opportunity for the patient to become an organ or tissue donor.

A10. [Critical Access Hospital, Hospital] The organization’s Staff education includes training in the use of exercises discretion and sensitivity to the circumstances, beliefs, and desires of the families of potential donors.

A11. [Critical Access Hospital, Hospital] The organization maintains records of potential donors whose names have been sent to the OPO and tissue and eye banks.

A12. [Critical Access Hospital, Hospital] The organization works with the OPO and tissue and eye banks as follows to do the following:

• In reviewing Review death records to improve identification of potential donors

• Ensure that the necessary testing and placement of potential donated organs, tissues, and eyes takes place, in order to maximize the viability of donor organs for transplant and maintain potential donors while preliminary suitability is determined

• To maintain potential donors while the necessary testing and placement of potential donated organs, tissues, and eyes takes place

• In educating Educate staff about donation issues

• Develop a donation policy that addresses opportunities for asystolic recovery, based on an organ potential for donation that is mutually agreed upon by the designated OPO, hospital, and medical staff

A 13. [Hospital only] For Hospitals Performing Transplant Services: A organization transplanting human organs must belong to the organ procurement and transplantation network (OPTN) established under section 372 of the Public Health Service Act and must abide by its rules.

A 14. [Hospital only] For Hospitals Performing Transplant Services: If requested, the organization provides all organ transplant-related data to the OPTN, the Scientific Registry, or the hospital’s designated OPO.

OFFICIAL PUBLICATION OF REVISIONS TO STANDARD
Nationwide List of Organ Procurement Organizations (OPOs)

Alabama
Alabama Organ Center
www.alabamaorganceter.org
500 22nd Str South, Suite 102
Birmingham, AL 35233
Ph: (205) 731-9200
Fax: (205) 731-6279

Alaska
LifeCenter Northwest
www.lifecenternorthwest.org
11245 SE 6th Street, Suite 100
Bellevue, WA 98004
Ph: (425) 201-6563
Fax: (425) 688-7641

Arizona
Donor Network of Arizona
www.dnaz.org
201 West Coolidge
Phoenix, AZ 85013
Ph: (602) 222-2200
Fax: (602) 222-2202

Arkansas
Arkansas Regional Organ Recovery Agency
www.arora.org
1701 Aldersgate Road, Suite 4
Little Rock, AR 72205
Ph: (501) 907-9150
Fax: (501) 372-6279

Mid-America Transplant Services
www.mts-stl.org
1110 Highlands Plaza Drive East
St. Louis, MO 63110
Ph: (314) 735-8200
Fax: (314) 991-2805

Mid-South Transplant Foundation, Inc.
www.midsouthtransplant.org
8001 Centerview Parkway, Suite 302
Memphis, TN 38018
Ph: (901) 328-4438
Fax: (901) 328-4462

Southwest Transplant Alliance
www.organ.org
5489 Blair Road
Dallas, TX 75231
Ph: (214) 522-0255
Fax: (214) 522-0430

California
California Transplant Donor Network
www.ctdn.org
1000 Broadway Avenue, Suite 600
Oakland, CA 94607
Ph: (510) 444-8500
Fax: (510) 444-8501

Golden State Donor Services
www.gsds.org
1760 Creekside Oaks Drive, Suite 220
Sacramento, CA 95833
Ph: (916) 567-1600
Fax: (916) 567-8300

LifeSharing—A Donate Life Organization
www.lifesharing.org
3465 Camino Del Rio South, Suite 410
San Diego, CA 92108
Ph: (619) 521-1983
Fax: (619) 521-2833

OneLegacy
www.onelegacy.org
221 South Figueroa Street, Suite 500
Los Angeles, CA 90012
Ph: (213) 229-5600
Fax: (213) 229-5601

Colorado
Donor Alliance
www.donoralliance.org
720 S. Colorado Boulevard, Suite 800-N
Denver, CO 80246
Ph: (303) 329-4747
Fax: (303) 321-1183

Connecticut
New England Organ Bank
www.neob.org
60 First Avenue
Waltham, MA 02451
Ph: (617) 244-8000
Fax: (617) 244-8755

LifeChoice Donor Services
www.lif choisiropo.org
8 Griffin Road North
Windsor, CT 06095
Ph: (800) 874-5215
Fax: (860) 545-4143

Delaware
Gift of Life Donor Program
www.donors1.org
401 North 3rd Street
Philadelphia, PA 19123
Ph: (215) 557-8090
Fax: (215) 557-9359

District of Columbia
Washington Regional Transplant Community
www.wrtc.org
7619 Little River Turnpike, Suite 900
Annandale, VA 22002
Ph: (703) 641-0100
Fax: (703) 658-0711

Florida
LifeQuest Organ Recovery Services
www.lifequestfla.org
Ayers Medical Plaza, North Tower
720 SW 2nd Avenue, Suite 570
Gainesville, FL 32610
Ph: (352) 733-0350
Fax: (352) 733-0353
<table>
<thead>
<tr>
<th>State</th>
<th>Organization</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>Life Alliance Organ Recovery Agency</td>
<td>225 NE 34 Street, Suite 100, Miami, FL 33137</td>
<td>(305) 243-7622</td>
<td>(305) 243-7628</td>
</tr>
<tr>
<td>California</td>
<td>TransLife</td>
<td>1560 Orange Avenue, Suite 400, Winter Park, FL 32789</td>
<td>(407) 644-3770</td>
<td>(407) 644-8876</td>
</tr>
<tr>
<td>Colorado</td>
<td>LifeLink of Florida</td>
<td>409 Bayshore Blvd., Tampa, FL 33606</td>
<td>(813) 348-6308</td>
<td>(813) 349-6515</td>
</tr>
<tr>
<td>Georgia</td>
<td>LifeLink of Georgia</td>
<td>2875 Northwoods Parkway, Norcross, GA 30071</td>
<td>(770) 225-5465</td>
<td>(770) 225-5454</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Legacy of Life Hawaii</td>
<td>405 N. Kuakini Street, Suite 810, Honolulu, HI 96817</td>
<td>(808) 599-7630</td>
<td>(808) 599-7631</td>
</tr>
<tr>
<td>Idaho</td>
<td>Pacific Northwest Transplant Bank</td>
<td>2611 SW 3rd Avenue, Suite 320, Portland, OR 97201</td>
<td>(503) 494 - 5560</td>
<td>(503) 494 - 4725</td>
</tr>
<tr>
<td>Illinois</td>
<td>Gift of Hope Organ &amp; Tissue Donor Network</td>
<td>425 Spring Lake Drive, Itasca, IL 60143</td>
<td>(630) 758-2600</td>
<td>(630) 758-2716</td>
</tr>
<tr>
<td>Indiana</td>
<td>Indiana Organ Procurement Organization</td>
<td>3760 Guion Road, Indianapolis, IN 46222</td>
<td>(317) 685-0389</td>
<td>(317) 685-1687</td>
</tr>
<tr>
<td>Iowa</td>
<td>Iowa Donor Network</td>
<td>550 Madison Avenue, North Liberty, IA 52317</td>
<td>(319) 665-3787</td>
<td>(319) 665-3788</td>
</tr>
<tr>
<td>Kentucky</td>
<td>Kentucky Organ Donor Affiliates</td>
<td>106 E. Broadway, Louisville, KY 40202</td>
<td>(502) 581-9511</td>
<td>(502) 589-5157</td>
</tr>
<tr>
<td>Louisiana</td>
<td>LifeCenter Organ Donor Network</td>
<td>615 Elsinore Place, Suite 400, Cincinnati, OH 45202</td>
<td>(513) 558-8997</td>
<td>(513) 558-8843</td>
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<tr>
<td>Maine</td>
<td>Life Center Organ Donor Network</td>
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<tr>
<td>Missouri</td>
<td>Mid-America Transplant Services</td>
<td>1110 Highlands Plaza Drive East, St. Louis, MO 63110</td>
<td>(314) 735-8200</td>
<td>(314) 991-2805</td>
</tr>
<tr>
<td>Montana</td>
<td>UW Health Organ Procurement Organization</td>
<td>450 Science Drive, Suite 220, Madison, WI 53711</td>
<td>(608) 262-3248</td>
<td>(608) 262-9099</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Nebraska Organ Recovery System</td>
<td>8502 West Center Road, Omaha, NE 68124</td>
<td>(402) 733-1800</td>
<td>(402) 733-9312</td>
</tr>
<tr>
<td>Nevada</td>
<td>Legacy of Life Nevada</td>
<td>405 N. Kuakini Street, Suite 810, Honolulu, HI 96817</td>
<td>(808) 599-7630</td>
<td>(808) 599-7631</td>
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</tbody>
</table>
Kansas
Midwest Transplant Network ♦
www.mwtn.org
1900 W 47th Place
Suite 400
Westwood, KS 66205
Ph: (913) 262-1668
Fax: (913) 262-5130

Kentucky
Kentucky Organ Donor Affiliates ♦
www.kyorgandonor.org
106 E. Broadway
Louisville, KY 40202
Ph: (502) 581-9511
Fax: (502) 589-5157

LifeCenter Organ Donor Network ♦
www.lifepassion.org
615 Elsinore Place,
Suite 400
Cincinnati, OH 45202
Ph: (513) 558-5000
Fax: (513) 558-8843

Tennessee Donor Services ♦
www.donatelifetn.org
1600 Hayes Street Suite 300
Nashville, TN 37203
Ph: (865) 588-1031
Fax: (865) 588-5903

Louisiana
Louisiana Organ Procurement Agency ♦
www.lopa.org
4441 N. I-10 Service Road
Metairie, LA 70002
Ph: (504) 837-3355
Fax: (504) 833-7894

Maine
New England Organ Bank ♦
www.neob.org
60 First Avenue
Waltham, MA 02451
Ph: (617) 244-8000
Fax: (617) 244-8755

Maryland
The Living Legacy Foundation of Maryland ♦
www.thellf.org
1730 Twin Springs Road,
Suite 200
Baltimore, MD 21227
Ph: (410) 242-7000
Fax: (410) 242-1871

Washington Regional Transplant Community ♦
www.wrwc.org
7619 Little River Turnpike,
Suite 900
Annandale, VA 22002
Ph: (703) 641-0100
Fax: (703) 658-0711

Massachusetts
New England Organ Bank ♦
www.neob.org
60 First Avenue
Waltham, MA 02451
Ph: (617) 244-8000
Fax: (617) 244-8755

LifeChoice Donor Services ♦
www.lifechoiceopo.org
8 Griffin Road North
Windsor, CT 06095
Ph: (800) 874-5215
Fax: (860) 545-4143

Center for Donation & Transplant ♦
www.cdttny.org
Albany Medical Center
218 Great Oak Boulevard
Albany, NY 12204
Ph: (518) 262-5606
Fax: (518) 262-5571

Michigan
Gift of Life Michigan ♦
www.giftoflifemichigan.org
3861 Research Park Drive
Ann Arbor, MI 48108
Ph: (734) 973-1577
Fax: (734) 973-3133

UW Health Organ Procurement Organization ♦
www.uwhealth.org/organdonation/madisonwisconsin/10868
450 Science Drive,
Suite 220
Madison, WI 53711
Ph: (608) 262-3248
Fax: (608) 262-9099

Minnesota
LifeSource ♦
www.life-source.org
2550 University Avenue West,
Suite 315 South
St. Paul, MN 55114
Ph: (651) 603-7800
Fax: (651) 603-7801

UW Health Organ Procurement Organization ♦
www.uwhealth.org/organdonation/madisonwisconsin/10868
450 Science Drive,
Suite 220
Madison, WI 53711
Ph: (608) 262-3248
Fax: (608) 262-9099

Mississippi
Mississippi Organ Recovery Agency ♦
www.msora.org
12 River Bend Place,
Suite B
Jackson, MS 39232
Ph: (601) 933-1000
Fax: (601) 933-1006

Mid-South Transplant Foundation, Inc. ♦
www.midsouthtransplant.org
8001 Centerview Parkway,
Suite 302
Memphis, TN 38018
Ph: (901) 328-4438
Fax: (901) 328-4462
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<td>1900 W 47th Place, Suite 400</td>
<td>(913) 262-1668</td>
<td>(913) 262-5130</td>
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<td></td>
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<td><a href="http://www.mts-stl.org">www.mts-stl.org</a></td>
<td>1110 Highlands Plaza Drive East</td>
<td>(314) 735-8200</td>
<td>(314) 991-2805</td>
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<td>Montana</td>
<td>LifeCenter Northwest</td>
<td><a href="http://www.lifecentrernorthwest.org">www.lifecentrernorthwest.org</a></td>
<td>11245 SE 6th Street, Suite 100</td>
<td>(425) 201-6563</td>
<td>(425) 688-7641</td>
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<td>(402) 733-1800</td>
<td>(402) 733-9312</td>
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<td>550 Madison Avenue</td>
<td>(319) 665-3787</td>
<td>(319) 665-3788</td>
</tr>
<tr>
<td>Nevada</td>
<td>Nevada Donor Network, Inc.</td>
<td><a href="http://www.nvdonor.org">www.nvdonor.org</a></td>
<td>2085 E. Sahara Avenue</td>
<td>(702) 796-9600</td>
<td>(702) 796-4225</td>
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<td>New Mexico</td>
<td>New Mexico Donor Services</td>
<td><a href="http://www.donatelifenm.org">www.donatelifenm.org</a></td>
<td>1609 University Blvd. NE</td>
<td>(505) 843-7672</td>
<td>(505) 343-1828</td>
</tr>
<tr>
<td></td>
<td>Intermountain Donor Services</td>
<td><a href="http://www.idslife.org">www.idslife.org</a></td>
<td>230 South 500 East, Suite 290</td>
<td>(801) 521-1755</td>
<td>(801) 364-8815</td>
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<td></td>
<td>California Transplant Donor Network</td>
<td><a href="http://www.ctdn.org">www.ctdn.org</a></td>
<td>1000 Broadway Avenue, Suite 600</td>
<td>(510) 444-8500</td>
<td>(510) 444-8501</td>
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<tr>
<td>New Hampshire</td>
<td>New England Organ Bank</td>
<td><a href="http://www.neob.org">www.neob.org</a></td>
<td>60 First Avenue</td>
<td>(617) 244-8000</td>
<td>(617) 244-8755</td>
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<tr>
<td>New Jersey</td>
<td>Gift of Life Donor Program</td>
<td><a href="http://www.donors1.org">www.donors1.org</a></td>
<td>401 North 3rd Street</td>
<td>(215) 557-8090</td>
<td>(215) 557-9359</td>
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<td>New Jersey Sharing Network</td>
<td><a href="http://www.sharenj.org">www.sharenj.org</a></td>
<td>691 Central Avenue</td>
<td>(908) 516-5400</td>
<td>(908) 516-5501</td>
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<td>New Mexico</td>
<td>New Mexico Donor Services</td>
<td><a href="http://www.donatelifenm.org">www.donatelifenm.org</a></td>
<td>1609 University Blvd. NE</td>
<td>(505) 843-7672</td>
<td>(505) 343-1828</td>
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<td>Upstate New York Transplant Services</td>
<td><a href="http://www.unyts.org">www.unyts.org</a></td>
<td>110 Broadway</td>
<td>(716) 853-6667</td>
<td>(716) 853-6674</td>
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<tr>
<td>New York</td>
<td>Center for Donation &amp; Transplant</td>
<td><a href="http://www.cdttny.org">www.cdttny.org</a></td>
<td>218 Great Oaks Boulevard</td>
<td>(518) 262-5606</td>
<td>(518) 262-5427</td>
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<td>Carolina Donor Services</td>
<td><a href="http://www.carolinadonorservices.org">www.carolinadonorservices.org</a></td>
<td>909 E. Arlington Blvd.</td>
<td>(252) 757-0090</td>
<td>(252) 757-0708</td>
</tr>
</tbody>
</table>
Texas
LifeGift
www.lifegift.org
2510 Westridge Street
Houston, TX 77054
Ph: (713) 523-4438
Fax: (713) 737-8110

Southwest Transplant Alliance
www.organ.org
5489 Blair Road
Dallas, TX 75231
Ph: (214) 522-0255
Fax: (214) 522-0430

Texas Organ Sharing Alliance
www.txorgansharing.org
8122 Datapoint Drive,
Suite 200
San Antonio, TX 78229
Ph: (210) 614-7030
Fax: (210) 614-2129

Utah
Intermountain Donor Services
230 South 500 East
www.idslife.org
Suite 290
Salt Lake City, UT 84102
Ph: (801) 521-1755
Fax: (801) 364-8815

Vermont
Center for Donation & Transplant
www.cdtny.org
Albany Medical Center
218 Great Oaks Boulevard
Albany, NY 12203
Ph: (518) 262-5606
Fax: (518) 262-5427

New England Organ Bank
www.neob.org
60 First Avenue
Waltham, MA 02451
Ph: (617) 244-8000
Fax: (617) 244-8755

Virginia
LifeNet Health
www.lifenethealth.org
1864 Concert Drive
Virginia Beach, VA 23453
Ph: (800) 847 – 7831
Fax: (757) 227-4690

Washington Regional Transplant Community
www.wrtc.org
7619 Little River Turnpike,
Suite 900
Annandale, VA 22002
Ph: (703) 641-0100
Fax: (703) 658-0711

Tennessee Donor Services
www.donatelifetn.org
1600 Hayes Street Suite 300
Nashville, TN 37203
Ph: (865) 588-1031
Fax: (865) 588-5903

Carolina Donor Services
www.carolinadonorservices.org
909 E. Arlington Blvd.
Greenville, NC 27858
Ph: (252) 757-0090
Fax: (252) 757-0708

Wisconsin
UW Health Organ Procurement Organization
www.uwhealth.org/organdonation/madisonwisconsin/10868
450 Science Drive,
Suite 220
Madison, WI 53711
Ph: (608) 262-3248
Fax: (608) 262-9099

Wisconsin Donor Network
www.wisdonornetwork.org/index.html
9000 W. Chester Street,
Suite 250
Milwaukee, WI 53214
Ph: (414) 937-6999
Fax: (414) 937-6998
Wyoming

Donor Alliance
www.donoralliance.org
720 S. Colorado Boulevard,
Suite 800-N
Denver, CO 80246
Ph: (303) 329-4747
Fax: (303) 321-1183

Intermountain Donor Services
www.idslife.org
230 South 500 East,
Suite 290
Salt Lake City, UT 84102
Ph: (801) 521-1755
Fax: (801) 364-8815

Virgin Islands

LifeLink of Puerto Rico
www.lifelinkfound.org/pr.cfm
Diamler-Chrysler Bldg.,
Suite 100, Calle 1#1
Metro Office Park
Guaynabo, PR 00968-1705
Ph: (787) 277-0300
Fax: (787) 277-0876

AOPO accredited organization