

## **NEW ENGLAND DONOR SERVICES**

### **Overview of Donation after Circulatory Death (DCD)**

In the US, individuals become deceased organ donors only after they have died and a **hospital provider** who is **independent** of the organ donation and transplantation process has declared death in accordance with law and hospital policy. This separation of roles is critical to maintaining patient safety and clinical integrity of the organ donation process.

There are two medically and legally recognized pathways for death to be declared whether or not organ donation is planned:

- 1) **Brain Death Declaration** – This occurs when a patient on mechanical ventilation is determined to have irreversible loss of brain function. This is determined by the hospital team caring for the patient through neurological testing. OPO staff is not involved in this diagnosis. The declaration of death is made even though the patient’s respiration and circulation can be artificially maintained through external mechanical ventilation.
  
- 2) **Circulatory Death Declaration** – This occurs when a patient is determined to have irreversible loss of circulatory function. This is diagnosed by the hospital care team by assessing for the absence of pulse and respiration for a period of time that indicates circulation has been permanently lost. There are circumstances where the hospital care team determines that a ventilator dependent patient faces a grave prognosis and the family elects to withdraw life-sustaining treatment including ventilator support. After the ventilator is removed, if the patient’s breathing and circulation irreversibly ceases, the patient is then declared dead by a hospital provider. OPO staff are not involved in that declaration. There are instances when the patient continues breathing on their own after the removal of ventilator support whether donation is involved or not.

In either circumstance, if organ donation is authorized by the next of kin (or the patient him or herself via a donor registry) and the patient is evaluated and determined to be medically suitable for organ donation, the process of organ donation will follow either a Donation after Brain Death (DBD) pathway or Donation after Circulatory Death (DCD) pathway.

Donation after Brain Death: Once the patient is declared brain dead by the hospital physician and authorization for organ donation is obtained, the donor is transferred to the operating room where the deceased donor is prepped and draped for surgery. The ventilator is typically not removed until the surgical team has begun the organ recovery process. This ensures that the organs remain viable for transplantation.

Donation after Ventilator Removal and Circulatory Death: If the patient’s care team determines the patient has suffered a non-survivable injury, the patient’s family and care team may decide to remove the patient from ventilator support. If authorization for organ donation is also obtained, the living patient remains under the care of hospital staff as preparations for organ donation are made. At the request of a transplant surgeon considering an organ offer, OPO staff may request the hospital perform (with permission from next of kin) diagnostic tests to better evaluate organ function (e.g. bronchoscopy). Hospital staff prepare the patient for ventilator removal by administering medications to manage pain, ensuring the patient's comfort before and after ventilator removal as standard end of life care in withdrawal circumstances. After the removal of the ventilator, if the patient does not reach circulatory death within the timeframe needed for organ donation, the patient is returned to the ICU or inpatient bed and remains under the care of the hospital care team. If the patient ceases to breathe and circulation ceases during the timeframe needed for organ recovery, a hospital provider will declare death in accordance with hospital protocol. Following death declaration, organ donation can proceed.

Critics of organ donation and OPOs use confusion between the two types of death declaration to sow distrust in the donation system and the organizations responsible for organ donation. These critics have used Congressional hearings to spread confusing, hearsay stories to imply a brain dead patient in Kentucky had “awoken”, leading to erroneous reporting in the media, to the detriment of donation and donation registration. Both the CMS survey report regarding the KY incident dated 12/16/2024 and the HRSA memo to their Associate Administrator dated 3/24/2025 confirm the donor in question was on a DCD donation pathway and **not** a brain dead donor pathway.

Despite the fact the patient in the following stories was being considered for DCD donation and was never declared brain dead, media and critics continue to assert it nonetheless:

NPR: *'Horrible' mistake to take organs from a living person was averted, witnesses say.*

NYT: *Doctors Were Preparing to Remove Their Organs. Then They Woke Up.*

CNN: *'Brain-dead' patient woke up in the OR.*

### **Critical Information for Understanding DCD Donation:**

- Brain death declaration and the removal of patients from ventilator support are not “donation” dependent medical circumstances. These processes occur thousands of times each year in the US even when there is no organ donation involved.

- Donation occurs only after death has been declared, either by brain death or circulatory criteria. Hospital physicians declare death, not OPO or transplant staff.
- Prior to death declaration, all potential organ donors are living patients and remain under the care of hospital staff.
- The decision to remove ventilator support is a decision made by next-of-kin in conjunction with the hospital care team. OPO staff are not involved in the family decision to withdraw mechanical support.
- Nearly all DCD donors exhibit some level of neurological function prior to death. By definition, a DCD donor does not meet the criteria for brain death prior to the family decision to remove them from ventilator support.
- In fact, in some instances, a patient can make their own decision to become a DCD donor while conscious at a hospital. A conscious, ventilator dependent patient, in consultation with their medical care team, can choose removal from the ventilator, i.e. patients suffering from late-stage ALS, patients with a high cervical spine fracture resulting in quadriplegia, cardiac patients dependent on mechanical circulatory support who are not transplant candidates. Neurological and brain activity is understood to be typical prior to death in a patient on a DCD pathway.
- In DCD cases, donation professionals are trained for scenarios in which a patient is removed from ventilator support but does not reach circulatory death during the timeframe needed for organ donation. When this happens, the donation process does not proceed, and hospital staff continue to provide care to the patient.
- A patient not reaching circulatory death after removal of the ventilator within a timeframe that permits DCD to take place, is not a rare event. Studies have shown *“Where the time from withdrawal of life-sustaining therapies to cardiac arrest exceeds that set by the transplant team, the process of DCD is stood down. This is reported in up to 25% of DCD attempts in the USA and 40% of DCD attempts in the UK.”* <https://amj.amegroups.org/article/view/9066/html>

**Roles and Responsibilities in DCD Pathway**

<b>Task</b>	<b>Responsible Party</b>
Admission to Hospital/ER/ICU	Hospital
Assessment of Patient	Hospital
Referral of Ventilated Patient Case to OPO per CMS Regs	Hospital
Donor Referral Intake and Tracking	OPO
Diagnosis of Patient Prognosis	Hospital
Prognosis Discussion with Legal Next of Kin (NOK)	Hospital
End of Life Treatment Options Discussion with NOK	Hospital
Ventilator Withdrawal Decision	Hospital/Family
Donation Timing Information provided to NOK	OPO
Donation Authorization	Family/OPO
Care of Patient Prior to Death and Donation	Hospital
Continued Neurological and Medical Assessments	Hospital
Requests for Donation Related Tests and Medication	OPO
Screening Tests Performed and Medications Ordered	Hospital
Running of National Transplant Waitlist List	OPO
Offers and Acceptances of Organs to Transplant Centers	OPO
Set Operating Time and Transportation Logistics	OPO
Care for and prepare patient for Ventilator Withdrawal	Hospital
Ventilator Withdrawal	Hospital
Declaration of Death	Hospital
Recovery of Organs after Death	OPO/Transplant Team

**Federal Support and Expectations for More DCD**

The donation and transplant system recovering organs from more donors through the DCD pathway is the result of explicit federal government encouragement as well as efforts by the donation and transplant community to increase transplants and reduce the waitlist. In the most recent CMS OPO Performance Report released in May 2025 (assessing year 2023), the federal government’s own data indicates that the OPOs they rate as “best performing” (Tier 1) recovered a disproportionate number of DCD donors when compared to the national average (38.3% vs. 36%).

## **Medicare and Medicaid Programs; Organ Procurement Organizations Conditions for Coverage: Revisions to the Outcome Measure Requirements for Organ Procurement Organizations; Final rule**

*An OPO is more likely to meet the donation rate measure if they also procure organs from donors after cardiac death (DCD)...*

*When the 2006 OPO final rule was published, DCD was so infrequent that those potential donors were not included in the definition of an eligible death; yet in 2019, almost 23 percent of all deceased donors were DCD donors. Based on public comments, we believe the CALC methodology produces a very close estimate to the current donor potential for each DSA...*

## **HHS's Organ Procurement and Transplantation Network DCD Procurement Collaborative**

*Procuring DCD organs and subsequently transplanting these organs with favorable outcomes is a practice conducted nationwide and was noted to be an area for growth potential. The primary aim of the project was to increase the number of DCD donors recovered by Organ Procurement Organizations (OPOs) ... Each cohort had a collective aim related to the number of DCD donors procured. Cohort A aimed to increase the procurement of DCD donors by 20% over the year prior, while Cohort B aimed to increase DCD donor procurement by 28% over the same six-month period during the year prior.*

*[https://hrsa.unos.org/media/mcsl2ebu/optn-dcd-procurement-collaborative\\_2022-executive-summary.pdf](https://hrsa.unos.org/media/mcsl2ebu/optn-dcd-procurement-collaborative_2022-executive-summary.pdf)*

## **HRSA Organ Donation Breakthrough Collaborative**

*Establish effective DCD practice. Establish OPO and hospital policies and protocols for donation after cardiac death (DCD) or non-heart-beat donation to ensure the referral of all patients with nonrecoverable neurological injuries and pursuit of donation options...*

*Integrate DCD routinely into all hospital staff education; develop hospital staff training program to include review of the literature, IOM recommendation, discussion of ethical considerations, case review, and clinical procedures....*

*Aggressively pursue each opportunity for DCD in the instances where it is clinically reasonable and the family wishes to donate regardless of policy status. On a regular basis, measure and report on DCD activity within OPO and Hospital...*

*<https://www.organdonationalliance.org/wp-content/uploads/2020/12/US-Organ-Donation-Breakthrough-Collaborative-Increases-Organ-Donation.pdf>*

### **National Academies of Science, Education and Medicine**

The Congressionally mandated study by the National Academies of Science, Education and Medicine, *Realizing the Promise of Equity in the Transplantation System*, specifically cited the need to grow DCD:

*“To increase efficiency, the organ transplantation system must prioritize the use of already available organs, while simultaneously expanding the donor pool in all ways possible, especially including procurement and use of more DCD donors to meet the needs of those on the transplant waiting list.” (6-2)*

And

*“Increase the number of organs procured from medically complex donors. In particular, increase DCDD donors to at least 45 percent of all deceased donors ...” (2-11)*

### **OPTN Deceased Donor Potential Study DHHS Contract 234-2005-37011C/0023**

In 2005 “the OPTN Contractor, [was] charged by HRSA to conduct a research study that revisits the existing understanding of deceased donor potential in the United States.” The findings of that study included:

*“There is broad agreement, supported by the results of this study, that many more deaths are eligible for organ donation than are included in the current OPTN definition of “eligible death.” The total pool of potential donors includes not only individuals declared brain dead, but also those whose conditions are consistent with brain death as well as donors after cardiac death.”*

*[https://optn.transplant.hrsa.gov/media/1161/ddps\\_03-2015.pdf](https://optn.transplant.hrsa.gov/media/1161/ddps_03-2015.pdf)*

And

*“Increase the use of DCD donors and evaluate new technology designed to improve organ quality.”*

### **HHS Secretary’s Advisory Committee on Transplantation (ACOT)**

As far back as November of 2006, ACOT wrote: <https://www.hrsa.gov/advisory-committees/organ-transplantation/recommendations/43-45>

*“ACOT recommends to the Secretary that the Medicare program allow donation after cardiac death (DCD) direct organ acquisition expenses be reimbursable to the organ procurement organization (OPO) under the Federal program.*

*When the next of kin has made the decision to pursue organ DCD, the Centers for Medicare and Medicaid Services-designated is responsible for expenses related to donation. ACOT recommends to the Secretary that the Medicare program allow these direct organ acquisition expenses to be reimbursable to the OPO under the Federal program. It would thereby remove a financial barrier to donation.”*

ACOT, in fact, recognized at the time the likelihood that a portion of patients on a DCD pathway would not die within the timeframe necessary, noting:

*“Reimbursement to the OPO would begin at the time donation consent is given and continue until the time organs are recovered, or the time a patient is returned to palliative care.”*

### **Conclusion**

Incomplete and sensationalized reporting can create an inaccurate picture that erodes public trust in the donation system. Erosion of public trust has real consequences: it can discourage people from registering as organ donors and families from saying yes to donation, resulting in fewer lifesaving transplants and harm to patients waiting. It can also unfairly tarnish the efforts of thousands of professionals who carry out this work with care, humility and deep respect for the donor and donor family every day.

## **NEDS Background**

- New England Donor Services (NEDS) is a leading nonprofit organization that coordinates organ and tissue donation in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, the eastern counties of Vermont, and Bermuda.
- Co-founded in 1968 by Nobel Laureate Dr. Joseph Murray, who performed the world's first successful organ transplant, NEDS today works with thousands of donors and donor families who have generously made the decision to give the gift of life.
- The organization's skilled staff medically screen referrals for potential donations from more than 200 hospitals across the region and lead all donor authorization discussions with families. NEDS also allocates organs according to the national transplant waiting list and coordinates their transport to ensure the right organs get to the right patients at the right time.

## **Record Growth**

- NEDS has achieved a record number of life-saving deceased donor organ donations and transplants in its New England service area for a fourth consecutive year.
- In 2024, NEDS coordinated organ donations from 648 deceased donors resulting in 1,570 life-saving organ transplants, representing an increase of 18% and 14% increase, respectively, from 2023.
- This record level of clinical activity places NEDS as the nation's second largest organ procurement organizations by organ donor volume.
- Since 2020, NEDS has increased the annual number of organ donors by 80 percent.
- NEDS also coordinated the recovery of donated tissue from 1,851 donors in 2024, including donated cornea, bone, skin, heart valves and other tissues used in necessary medical procedures to heal and transform lives.
- Tissue donated through NEDS is used in upwards of 60,000 tissue transplants each year.