

Donation after Brain Death versus Donation after Cardiac Death

Lifeline of Ohio publishes the following as a guide describing the difference between organ donation after brain death (DBD) and donation after cardiac death (DCD).

	Donation After Brain Death	Donation after Cardiac Death (DCD)
Injury	Severe brain injury from trauma, cerebral vascular accident, anoxic event, other – REFERRAL TO OPO	Severe brain injury from trauma, cerebral vascular accident, anoxic event, other - REFERRAL TO OPO
Meets Criteria for Brain Death	Yes: Clinical Exam (including apnea test) is consistent with brain death. If unable to fully complete any part of the clinical exam, a confirmatory test is required (i.e., Nuclear Flow).	No: Some neurological reflex is still present
Prognosis	Brain death: This is the legal time of death	As determined by hospital physician, patient has no chance of recovery from brain injury; cannot survive without mechanical ventilator.
Action	<p>Brain death declaration is made by hospital physician (not OPO). Signed brain death note and consent form are faxed to OPO.</p> <p>Once brain death is declared, OPO and Hospital work cooperatively on medical management of the donor patient. Patient remains on ventilator throughout organ recovery.</p> <p>Anesthesiology is present for intra-operative fluid and BP management Transplant team spends three to four hours recovering organs in-situ.</p>	<p>Family/NOK elects to withdraw support Donation discussion with family, they consent. Signed futility note and consent form get faxed to OPO. OPO and hospital work cooperatively on medical management of the donor patient. Withdrawal of support can take place in OR or ICU</p> <ul style="list-style-type: none"> • RT with a portable vent is used for OR w/d • ICU nurse administers meds for w/d <p>Cardiac death</p> <ul style="list-style-type: none"> • No blood pressure, pulse or cardiac sounds • No spontaneous respiration <p>Wait five minutes to ensure no auto-resuscitation.</p> <p>After five minutes of ceased circulation, hospital physician (not OPO) declares death. Transplant team immediately begins organ recovery; takes one to two hours to recover organs en-bloc.</p>
Potential organs	Heart, lungs, liver, pancreas, kidneys and intestine	Lungs, liver, pancreas and kidneys
Key Points	<p>The time of brain death is legal time of death</p> <p>Brain death is not a coma, it's irreversible – brain cells do not recover</p> <p>Organs dissected in-situ</p> <p>Maintained on ventilator throughout the organ recovery</p>	<p>DCD is only discussed with families after decision to withdraw support has been made</p> <p>Rapid recovery of organs procured en-bloc</p> <p>If patient doesn't expire within two hours, organ donation is no longer possible, and the patient is returned to the sending unit. He/she is not re-intubated. RN to call OPO with CTOD.</p>