

Organ Donation after Cardio-Circulatory Death (DCD)

BC Transplant is here to support you and your family

BC Transplant is here to support your family and to answer your questions as you face many of the end of life decisions that come with a sudden and tragic loss of a loved one.

Organ and tissue donation is the most precious, unique and selfless gift a person can give; it is the ultimate act of humanity, making the individuals and families who choose the opportunity, true heroes.

Is Organ Donation the Right decision for your loved one?

Has your loved one previously registered as an organ donor, or discussed their end of life wishes? A BC Transplant representative can check the provincial organ donation registry to confirm if they have registered their decision to be a donor.

Many people are in favour of organ donation, but have not formally registered with BC Transplant. Would organ donation be something that your loved one would want at this time?

What can you expect if your loved one is an organ donor?

Your loved one will be cared for with respect and dignity throughout the entire process

A BC Transplant specialist will meet with your family to review the consent for organ donation, and to obtain medical and social history. BC Transplant will be available as a support and resource throughout the entire organ donation process.

Prior to proceeding with organ donation, extensive testing, such as blood work, chest x-rays, CT Scan, and Bronchoscopy may be required to further determine which organs are suitable to donate. Every donor is tested for infectious diseases such as HIV, Hepatitis B and C, and syphilis. Medical testing, recipient matching and coordination of surgical times can take up to 24 hours.

When organ donation occurs after Cardio Circulatory Death you are given the opportunity to say your good byes in the Intensive Care Unit, before your loved one is moved to the operating room. The surgical procedure for removal of organs can take up to four hours.

BC Transplant will ask if you wish to be contacted when the surgical retrieval of organs is completed. Sometime over the next week, your family will receive a letter from BC Transplant to thank you for donation and to inform you of the outcome.

What happens in the organ donation process?

Once the decision of donation has been made, a plan will be discussed to determine a time frame for the removal of life sustaining treatments. This could be anywhere from 12-24 hours after the decisions has been made.

During this time, the patient will remain on the ventilator and will continue to receive medications while all the necessary medical testing and preparation for possible organ donation occurs.

The exact timing of removal of the ventilator will be coordinated and agreed upon by the family, BC Transplant, intensive care unit, and the operating room staff.

Families are welcome to remain at the bedside of their loved one while the hospital staff removes life support and provides comfort care. If death occurs quickly after disconnection from ventilator support, the patient can become an organ donor. If death does not occur rapidly, the organs will have suffered anoxia (lack of blood flow & oxygen) making the organs unsuitable for transplant. Death must be declared by two physicians independent of the transplant process.

The patient is then quickly moved into the operating room where the sterile surgical procedure is performed to recover the transplantable organs. The surgery to recover the organs is like any surgery: a very delicate, careful procedure.

What organs can be donated?

The option of what organs can be donated will be different for every patient, depending on their health and medical history. Patients who meet the DCD criteria can be assessed to donate:

- Lungs,
- Liver,
- Kidneys,
- Pancreas, and
- Cornea (eyes)

End of Life

Your loved one has suffered a serious injury that has resulted in permanent and irreversible brain damage. The heart and other vital functions are being maintained through life support treatments (such as a ventilator).

It is at this time you may hear terms such as, “non-survivable brain injury”, “irreversible brain damage”, and “severe anoxic brain injury” which indicate that there is no chance for recovery or survival.

What do these terms mean to you and your loved one? It means that the medical team has exhausted all treatment options and ongoing life support is no longer helpful to your loved one. At this point, you and your family will be approached to discuss a plan to remove all life sustaining treatments.

What is Donation after Cardio-Circulatory Death? (DCD)

When a person’s heart permanently stops beating, they have experienced Cardio-Circulatory Death.

Donation after Cardio-Circulatory Death (DCD) is an option for organ donation for patients with severe brain injuries once a decision to remove all life sustaining treatments has been made.

How is this brain injury different from being in a Coma or Vegetative State?

It is important to understand the difference between patients who are considered for organ donation because of their severe non-recoverable brain injury, and patients who are in a coma or a vegetative state who are not appropriate for organ donation.

A patient who meets the criteria for DCD will have no hope of survival due to their significant and irreversible brain damage. The severity of their brain injury would cause them to die very quickly after the removal of life sustaining treatments (such as the ventilator). These patients will not be able to take enough breaths with their own strength to sustain their life. The physicians caring for your loved one will complete testing to determine if they can breathe on their own without life support.

Patients who are in a coma or vegetative state will have varying levels of brain function depending on the severity of the brain injury. These patients can often live for a long time off of life support because they can breathe with their own strength. These patients are not appropriate for Donation after Cardio-Circulatory Death and would not be considered for organ donation because they can maintain higher level brain functions, and can sometimes recover or wake up from a coma.

What if you have more questions?

During this time of tragedy, BC Transplant is here to support you and your family; answering any questions or concerns you may have, at any time of day.

Toll Free Information Line: 1-800-663-6189

Lower Mainland: 1 (604) 877-2240

www.transplant.bc.ca

Glossary

Aneurysm – a weakness and dilation of a blood vessel (similar to a balloon) which as it expands has the potential for rupture. Rupture of an aneurysm in the brain causes a stroke.

Angiography (Angio) – a test to confirm absence or presence of blood flow.

Ancillary Testing – a specific test to determine the absence or presence of blood flow in the brain

Apnea - not breathing.

Brain Hemorrhage - leakage of blood from the blood vessels into the brain itself.

Brainstem Reflexes - reflex actions such as pupil response to light, cough, gag, breathing and movement. The absence of brainstem reflexes indicates the brain is no longer able to send messages to the body to make it work - to breathe and to perform other vital functions. Therefore, brain stem death or neurological death is death.

Bronchoscopy - a procedure to visualize inside a patient's airways and lungs.

Cardio-Circulatory Death - refers to death that occurs after the heart stops beating.

CT Scan - a special X-ray technique that uses a computer to incorporate multiple X-ray images into a 2 dimensional cross-sectional image.

Coma – a deep, prolonged and sometimes irreversible unconsciousness. A Coma is **not** the same state as Brain Death.

Comfort Care – providing a comfortable, peaceful, and dignified death

Declaration of Death - the time a patient is declared dead.

Diagnosis – the process of identifying a disease from its signs and symptoms.

Echocardiogram (Echo) – an ultrasound of the heart that shows how the heart muscle and valves are functioning.

Magnetic Resonance Imaging (MRI) – a special imaging technique used to show internal structures of the body.

MI (Myocardial Infarction) – heart attack

Neurological – having to do with the brain and/or other parts of the central nervous system.

Stroke (Cerebral Vascular Accident) – a sudden loss of consciousness, sensation, and voluntary motion caused by rupture or obstruction of an artery in the brain.

Ventilator – a machine which mechanically assists a patient’s breathing, or takes over this function when they cannot breathe.

Healthcare Team:

ICU Nurses: _____

ICU Doctors: _____

BC Transplant Donation Coordinator: _____

Social Worker: _____

Pastoral Care: _____

Other: _____

