

Developing a Brain-based Definition of Death and Evidence-based Criteria for its Determination after Arrest of Circulation or Neurologic Function in Canada

What is this project about?

Project background

When proceeding with deceased organ donation, a clear definition and determination of death are of critical importance. The concepts currently in practice have created the idea of two distinct forms of death – brain death and cardiac death.

However, cardiac death is indeed brain death. That is, arrest of circulation leads to absent brain blood flow, which in turn leads to the rapid loss of brain function.

There is a need to review and update Canadian clinical practice guidelines, including the definition of death, to align practices with current scientific evidence and address evolving legal and ethical considerations.

Objectives

The objective of this project is to develop a clinical practice guideline that includes a brain-based definition of death as well as evidence-based and expert-informed criteria for death determination after arrest of circulation or neurologic function.

Overview of activities

- Gather and analyze national and international evidence to determine what is applicable in a Canadian context in the areas of legislation, regulations, ethics and medical guidelines.
- Conduct stakeholder consultations, including the public, patients and their families, and a variety of health care professionals, to ensure that the values, interests and concerns of those affected are incorporated in the guideline.

How will the project improve the organ donation and transplantation system in Canada?

The project will contribute to:

- Improving clinical practices through an examination of medical, ethical, legal considerations related to death determination.
- Minimizing diagnostic errors.
- Enhancing trust and integrity in the deceased donation and transplantation system.

The project leads

The project is led by the Canadian Critical Care Society (CCCS) in partnership with the Canadian Blood Services (CBS) and the Canadian Medical Association (CMA).



Dr. Sam Shemie
Medical Advisor, Canadian
Blood Services



Dr. Bojan Paunovic
President, Canadian
Critical Care Society

“Organ donation after death accounts for the vast majority of transplantation in Canada. Clarity around the medico-legal definition of death and updating the clinical procedures for the determination of death in Canada are required to maintain and enhance the trust and integrity of defining and determining death for the purposes of organ donation.”

**EXPECTED PROJECT
COMPLETION IN 2022**

The Organ Donation and Transplantation Collaborative is an initiative led by Health Canada with provinces and territories (except Québec), Canadian Blood Services, patients, families, clinicians and researchers. Funded by Health Canada, the project *Developing a Brain-based Definition of Death and Evidence-based Criteria for its Determination after Arrest of Circulation or Neurologic Function in Canada* contributes to the Collaborative’s vision to achieve organ donation and transplantation system improvements that result in better patient outcomes and an increase in the number and quality of successful transplantations. For more information, please consult the Organ Donation and Transplantation Collaborative (the Collaborative) website: <https://tinyurl.com/ODTCollaborative>.