# THE NATIONAL CATHOLIC BIOETHICS CENTER



## **BRAIN DEATH**

Prepared by the Ethicists of the NCBC February 2015

"The determination of death should be made by the physician or competent medical authority in accordance with responsible and commonly accepted scientific criteria." —USCCB, *Ethical and Religious Directives for Catholic Health Care Services*, 5th ed. (2009), n. 62.

### ✤ Summary ❖

#### **Death and Its Determination**

Death is properly understood as the separation of body and soul.
 The inability to observe this separation directly requires that medical professionals look for signs and indicators that death occurred at a previous time. The precise moment of death itself cannot be known with moral certainty.
 Death is determined in either of two ways, as noted in the 1981 guidelines of the American Medical Association: (1) By assessing cardiopulmonary function: "An individual with irreversible cessation of circulatory and respiratory functions is dead. Irreversibility is recognized by persistent cessation of functions during an appropriate period of observation and/or trial of therapy." (2) By assessing neurological function: "An individual with irreversible cessation of all functions of the entire brain, including the brain stem, is dead."

#### **Determination of Death by Neurological Criteria**

Determining death by neurological criteria typically involves testing protocols that rely on (a) bedside testing to assess absence of responses and reflexes, (b) apnea testing to assess the absence of the ability to breathe or initiate a breath, and (c) possible confirmatory tests to further assess the absence of brain activity (for example, an EEG) or the absence of blood flow to the brain (for example, an angiogram).
Brain death is a phenomenon made possible by the development of ventilators.
Use of a ventilator alone to assist with maintaining lower organ function for a brain dead individual (without further interventions) will typically enable survival for a matter of hours or days before an inevitable state of cardiac arrest ensues.
Yet contrary to previous perceptions that brain death invariably leads to cardiac arrest, any degree of brain failure, including brain death, can be sustained almost indefinitely with mechanical ventilation and vigilant care, including the use of means such as vasopressors, pacemakers, temperature regulation, various hormones, and other pharmaceutical support.
Pregnant women who have undergone brain death can sometimes have the pregnancy successfully maintained within their corpse so that the child can continue to grow and reach viability/delivery.

#### Moral Acceptability of Brain Death Determinations and Organ Transplantation

 Pope St. John Paul II stressed that the criterion for determining brain death, "namely the complete and irreversible cessation of all brain activity, if rigorously applied, does not seem to conflict with the essential elements of a sound anthropology" (address, August 29, 2000, n. 5).
 Health care workers can use these neurological criteria as the basis for arriving at "moral certainty" that an individual has died. This moral certainty is considered the necessary and sufficient basis for an ethically correct course of action.
 Only where such certainty exists, and where informed consent has already been given by the donor or the donor's legitimate representatives, is it morally right to initiate unpaired organ transplantation.

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### ✤ FAQ ◆

Question 1. To what does the expression "brain death" refer?

*Reply:* "Brain death" refers to the medical judgment that a person is dead, determined by neurological criteria. Properly diagnosed, brain death means the complete cessation of all organized neurological activity throughout the entire brain, including the cerebrum, cerebellum, and brain stem. When all brain activity has ceased, the body irrevocably ceases to function as a unified whole. The appropriate phraseology here is "the determination of death using neurological criteria."

#### Question 2. Why does the Church accept this definition of death?

*Reply:* This is not a new definition of death but rather of the use of new signs to determine that death has occurred. The Christian understanding has always been that death is the separation of the soul from the body. The Catholic Church looks to the medical community to determine the biological signs that indicate with moral certainty that this event has already occurred. In recent years, medical research has indicated that the irreversible loss of brain function provides a firm indicator that death has already occurred.

**Question 3**. What does Catholic theology say about this definition of death?

*Reply:* Neurological criteria are compatible with Catholic teaching that a human being is a substantial union of body and rational soul. The complete and irreversible loss of all brain function may be taken as a reasonable indicator that the rational soul is no longer present.

Question 4. Does the use of brain-death criteria cause the death of the patient?

*Reply:* The use of brain-death criteria does not cause the death of the patient, but only assesses and confirms the signs that indicate whether that death has already occurred. This is analogous to the way that cessation of heartbeat and respiration have traditionally been used to carry out that assessment.

Question 5. May I receive organs for transplant from those declared dead using neurological criteria?

*Reply:* Yes, a faithful Catholic may receive organs from a donor who is declared dead by neurological criteria. A faithful Catholic may also make provisions for the donation of his own organs in the event of his death, whether it is determined by cardiopulmonary or neurological criteria.

Question 6. Why do some say that taking organs from those declared dead by neurological criteria is a form of homicide?

*Reply:* Such comments are irresponsible. Those who make such statements wrongly believe that a person is still alive because the corpse appears to be alive from the effect of oxygenated blood being pumped through the body by mechanical means. Those who reject the use of neurological criteria for the determination of death claim that a patient declared dead by this method is killed for his organs. Such comments overlook the important distinctions mentioned above, and are in tension with sound Catholic teaching.

In medical practice, a physician who is not on the organ transplant team must declare death to avoid any potential conflict of interest. However, it must be emphasized that the neurological criteria must be rigorously and consistently applied and a judgment made of total brain death before a person is declared dead.

### ✤ Resources ◆

John Haas, "Catholic Teaching regarding the Legitimacy of Neurological Criteria for the Determination of Death," *National Catholic Bioethics Quarterly* 11.2 (Summer 2011): 279–299.

John Paul II, Address to the Eighteenth International Congress of the Transplantation Society (August 29, 2000), Vatican website.

THE NATIONAL CATHOLIC BIOETHICS CENTER 6399 Drexel Road, Philadelphia, PA 19151 • 215.877.2660 www.ncbcenter.org