Name of Policy: Request for Determination of Death by Brain Criteria **Policy Number**: 3364-100-45-02 **Approving Officer**: Chief Executive Officer, Chief Medical Officer, Chief of Staff **Responsible Agent**: Chief Nursing Officer **Scope**: The University of Toledo Medical Center	UTOLEDO HEALTH **Effective date:** 6/2026 **Original effective date**: 1/14/1981
Key words: brain death, criteria, checklist, documentation, request	

☐	New policy proposal	☐	Minor/technical revision of existing policy
☐	Major revision of existing policy	☒	Reaffirmation of existing policy

(A) Policy statement

To conform with Ohio law and applicable medical practice standards for determination of brain death.

(B) Purpose of policy

To assure appropriateness of death by brain criteria.

(C) Procedure

1. To initiate a determination of death by brain criteria, the attending service must complete the attached Checklist. The Checklist titled *Determination of Death by Brain Criteria for Adults and Children 1 Year of Age and Older* is attached as Exhibit A.

2. Clinical Determination. The clinical determination required for determination of death by brain criteria will be completed according to the Checklist. This will include: Clinical and Laboratory Finding assessment, Neurological examination(s), apnea test and if needed ancillary testing. A second neurological exam must be done either by a different attending or secondary consulting service attending.

3. Ancillary Testing. If apnea test is inconclusive or aborted, ancillary testing needs to be completed. This may include SPECT, angiography, or EEG. If patients are on CNS depressants and levels are in a therapeutic range, ancillary testing needs to be completed. This may include SPECT or angiography. Results consistent with brain death:

   a. SPECT or angiography shows absent cerebral blood flow; or

   b. EEG shows electro-cerebral silence.

4. If the clinical criteria for brain death are met, and ancillary testing, if done, is consistent with brain death, a second neurological examination must be completed by either a different attending or a secondary consulting service attending.

5. When determination of death by brain criteria is made, the attending physician initiating the determination will sign the Checklist.

6. The attending physician will make a concluding note in patient's chart regarding the time of death of the patient. No declaration of death by brain criteria may be made in the patient’s chart until the signature is made on the Checklist.

7. Upon the declaration of death and charting in the medial record, the patient will be declared dead and life support may be withdrawn. Upon declaration of death a Do Not Resuscitate Order is not necessary for the patient.

Approved by:

/s/

_____
Daniel Barbee
Chief Executive Officer

6/1/2026

_____
Date

/s/

_____
Michael Ellis, MD
Chief Medical Officer

6/1/2026

_____
Date

/s/

_____
Puneet Sindhwani, MD
Chief of Staff

6/2/2026

_____
Date

/s/

_____
Kurt Kless
Chief Nursing Officer

6/1/2026

_____
Date

Review/Revision Completed by:
Risk Management
Nursing Administration
Hospital Administration
Office of Legal Affairs

Policies Superseded by This Policy:

- *7-45-02 - Request for Determination of Death by Brain Criteria*

Initial effective date: *January 14, 1981*

Review/revision date:
January 10, 1982
July 2, 1984
February 19, 1987
May 19, 1990
May 8, 1991
October 13, 1993
September 14, 1994
September 11, 1996
July 14, 1999
July 10, 2002
August 10, 2005
August 1, 2008
September 1, 2011
October 1, 2012
March 1, 2016
April 1, 2020
May 1, 2021
6/2026

Next review date: 6/2029

Exhibit A:

THE UNIVERSITY OF TOLEDO MEDICAL CENTER

Determination of Death by Brain Criteria for Adults

Patient Label

To obtain determination of Death by Brain Criteria for Adults, the attending service will complete this form and follow the directions on the reverse side.

I. REQUIRED CLINICAL AND LABORATORY FINDINGS

		CHECK RESPONSE	
A.	Imaging findings consistent with neurological deficit.	☐ Yes	☐ No
B.	Systolic blood pressure ≥100 mm Hg.	☐ Yes	☐ No
C.	Normothermia ($37^{o}C \pm 2.0^{o}$).	☐ Yes	☐ No
D.	The following metabolites are normal or if abnormal, cannot account for coma: (Glucose, BUN, Creatinine, Na, K, Cl, CO_2, NH_3, Ca, PO_4).	☐ Yes	☐ No
E.	No evidence of residual paralytics (electrical stimulation if paralytics used).	☐ Yes	☐ No
F.	Toxicology screen performed.	☐ Yes	☐ No
G.	Please check either i or ii and also mark appropriate response		
	i ☐CNS depressant drug effect absent (i.e. adequate clearance based on 5 times drug's half life or if drug plasma levels below the therapeutic range; for barbiturates, level *<10 µg/ml*).	☐ Yes	☐ No
	ii ☐If CNS depressant drugs in therapeutic range, Nuclear medicine brain scanorangiography shows no cerebral blood flow		

Consult alternate service to perform part II second exam. If second exam is consistent with first exam, brain death can be declared.

II. REQUIRED FINDINGS ON NEUROLOGICAL EXAMINATION

		CHECK RESPONSE			
		FIRST EXAM		SECOND EXAM	
A.	Comatose with no motor responsiveness to painful stimuli.	☐ Yes	☐ Unable	☐ Yes	☐ Unable
B.	Absent pupillary light reflexes to bright light.	☐ Yes	☐ Unable	☐ Yes	☐ Unable
C.	Absent corneal reflexes.	☐ Yes	☐ Unable	☐ Yes	☐ Unable
D.	Absent oculocephalogyric reflex, if not contraindicated.	☐ Yes	☐ Unable	☐ Yes	☐ Unable
E.	Absent ice water caloric responses.	☐ Yes	☐ Unable	☐ Yes	☐ Unable
F.	Absent suck, gag, and coughing reflexes.	☐ Yes	☐ Unable	☐ Yes	☐ Unable
G.	Absent spontaneous respirations.	☐ Yes	☐ Unable	☐ Yes	☐ Unable
H.	Flaccid extremities with no spontaneous movements	☐ Yes	☐ Unable	☐ Yes	☐ Unable

Sections I and II (First exam) require a "Yes" or "Unable" response to proceed to apnea test.

First Exam Physician Signature:_____ Date:_____ Time_____

Second Exam Physician Signature:_____ Date:_____ Time:_____

III. APNEA TEST RESULTS:

	PO_2	**PCO_2**	**pH**
Before	_____	_____	_____
After	_____	_____	_____

Signature of Supervising Physician:_____ Date:_____ Time_____

☐ **Met Apnea test criteria by requirements stated in the instructions on reverse side.**

☐ **Apnea test inconclusive or aborted, order ancillary test (Nuclear medicine brain scan, , angiography or EEG) and consult alternate service to perform second exam.**

IV. ANCILLARY PROCEDURES (Nuclear medicine brain scan, ANGIOGRAPHY OR EEG).

Procedure & Results:_____ Date:_____ Time:_____

If angiography or Nuclear medicine brain scan confirms no blood flow, or if EEG shows electrical cerebral silence, brain death can be declared.

V. CLINICAL CONFIRMATION OF DEATH BY BRAIN CRITERIA (Separate progress note needs to be documented)

Physician Signature_____ Date:_____ Time_____

Print Name:_____

PNSCAN

I. Clinical Examination

Items in Sections I require a "Yes" response.

All items in Section II require a yes response. Unless physical alteration of patient precludes examination.

Repeat of the clinical examinations will be done at different intervals by an alternate service depending on the use of a confirmatory laboratory procedure.

If absence of cerebral blood flow is demonstrated by Nuclear medicine brain scanor angiography, then no further observation is needed.

IT IS CRITICAL TO PERFORM A THOROUGH CLINICAL EVALUATION AND APPROPRIATE DIAGNOSTIC TESTING TO EXCLUDE REVERSIBLE OR TREATABLE CONDITIONS.

II. Vestibular Caloric Reflex Stimulation

1. Check auditory canals for obstruction.
2. Flex head to 30^{o} above horizontal with patient supine.
3. Irrigate external auditory canal with 40 mL of ice water.
4. Observe for tonic deviation of eyes.

III. Apnea Test

Performance of the Apnea Test should be requested from Respiratory Therapy. The examining physician must be present during the test to ensure patient safety and to witness the test.

The Apnea Test is carried out as follows:

1. Ventilate patient on 100% oxygen for 20 minutes.
2. Draw blood for determination of arterial blood gases.
3. Insert a catheter via the endotracheal tube into the trachea above the carina for insufflations with 100% O_2 at 6 liter per minute
4. If the patient does not breathe for 8-10 minutes, repeat blood draw for determination of blood gases.
5. Remove catheter and resume ventilation.
6. The test is positive if there is a rise in PCO2 to 20 points above baseline or PCO2 $\geq$ 60 mmHg while the ventilator is turned off.
7. If the patient does not tolerate the apnea test, as evidence by significant drop in BP, O2 desaturation, or significant arrhythmias, the test is interrupted and an ancillary test is performed.

IV. Ancillary testing

To be performed if clinical examination cannot be fully performed due to patient factors, or if apnea test inconclusive or aborted. Ancillary tests include: Nuclear medicine brain scanor angiography that demonstrates absence of cerebral blood flow OR EEG to demonstrate electrical silence.

V. Clinical confirmation of death by an Attending Physician or Designate is Required.

If there is agreement that the brain criteria of death are met, any of the attending physicians involved in the determination of brain death will write a concluding note in the progress notes stating that Death by Brain Criteria exists in this patient. A physician will then declare the patient dead and any life support systems may be withdrawn.