DEPARTMENT OF THE NAVY
BUREAU OF MEDICINE AND SURGERY
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IN REPLY REFER TO
BUMEDINST 5360.24B
BUMED-M3/M00L
23 Feb 2022

BUMED INSTRUCTION 5360.24B

From: Chief, Bureau of Medicine and Surgery

Subj: DEFINITION OF DEATH

Ref: (a) National Conference of Commissioners on Uniform State Laws, Uniform Determination of Death Act (1980)
(b) JAMA, "Determination of Brain Death/Death by Neurologic Criteria," Published online August 2020
(c) BUMEDINST 6300.8B

1. Purpose. To establish policies and procedures per the Uniform Determination of Death Act (UDDA)(1980), reference (a). This instruction is a complete revision and should be reviewed in its entirety. The changes in subparagraphs 1a and 1b have been implemented.

a. Bureau of Medicine and Surgery (BUMED), Healthcare Operations (BUMED-M3) added as a co-sponsor for this instruction.

b. Updated determination of death criteria based on changes in medical literature.

2. Cancellation. BUMEDINST 5360.24A.

3. Scope and Applicability. This instruction applies, in all instances, to ships at sea where determination of death is an issue, overseas in the absence of applicable Status of Forces Agreement provisions, and within the United States in the absence of an applicable State statute. Providers and administrators must be familiar with the particular laws that apply to their facility and will consult the facility judge advocate or legal officer for guidance, as appropriate. Reference (a) has been adopted by most States. Reference (a) is available at https://www.uniformlaws.org/viewdocument/final-act-49?CommunityKey=155faf5d-03c2-4027-99ba-ee4c99019d6c&tab=librarydocuments. Some State laws also contain provisions allowing competent adults with certain religious beliefs to declare in advance that the traditional, heart-oriented definition of death should be applied to them. Be aware that laws change and vary from one jurisdiction to another. In general, State law does not control the practice of medicine in Federal facilities; however, claims alleging medical negligence are resolved per the law of the State where the act or omission occurred. In any State where there is a conflict between this instruction and that State's law, whenever possible the facility should apply the law of the State in which the facility is located.

4. Background. Under the traditional common law definition, clinical death occurs when the body's respiration and circulation cease. Modern technology can now sustain respiration and

circulation in people with irreversible cessation of brain function. As a result, the definition of death has been broadened to include irreversible cessation of brain function in circumstances in which the patient's respiratory and circulatory functions are maintained by artificial means. The traditional common law definition remains applicable in all other situations.

5. Definition of Death. The following definition of death will apply in the absence of an applicable State statute or guidance under a Status of Forces Agreement and to ships at sea where determination of death is an issue. An individual, who has sustained either: (1) irreversible cessation of circulatory and respiratory functions or (2) irreversible cessation of all functions of the entire brain, including the brain stem, is dead.

6. Determination of Death Criteria. A determination of death will be made per accepted medical standards, reference (b). Reference (b) is available at https://jamanetwork.com/journals/jama/article-abstract/2769149?utm_campaign=articlePDF&utm_medium=articlePDFlink&utm_source=articlePDF&utm_content=jama.2020.11586. In the absence of an applicable State statute or guidance under a Status of Forces Agreement, and for ships at sea where determination of death is an issue, the determination will include either:

a. Irreversible cessation of circulatory and respiratory functions in an individual; or

b. Irreversible cessation of all brain functions, including the brain stem, termed "brain death."

(1) Cessation of all brain functions is determined by the absence of both responsiveness (coma) and brain stem reflexes. The absence of brain stem reflexes indicates that brain death has progressed from the brain's higher centers to those that control respiration, heart rate, and blood pressure. Brain stem reflexes include:

(a) Documentation of absence of brainstem reflexes:

1. Pupillary light reflex.

2. Oculocephalic reflex.

3. Oculovestibular reflex.

4. Corneal reflex.

5. Grimacing, facial muscle movement, or motor response of the limbs other than spinally-mediated peripheral motor reflects.

6. Gag reflex.

7. Cough reflex.

8. Sucking and rooting reflex (newborns).

(b) Documentation of absence of motor response to pain.

(c) Documentation of apnea test (absence of respiration effort with partial pressure of carbon dioxide (PaCO2)>=60mm Hg).

(d) Documentation of justification of confirmatory test and result of confirmatory test.

(e) Documentation of repeat neurological examination after 6 hours.

(2) A determination of irreversibility requires all listed in subparagraphs 6b(2)(a) through 6b(2)(c):

(a) The cause of coma must be established and must be sufficient to account for the loss of brain function.

(b) Reversible causes of brain function loss must be excluded. Such reversible causes include hypothermia, hypotension, acute drug intoxication or drug effect, neuromuscular blockade, and profound metabolic abnormalities (such as severe electrolyte or liver abnormalities).

(c) Cessation of all brain function must persist for an appropriate period of observation or trial of treatment. The necessity and duration of observation is a matter of clinical judgment. Often data from the history and one appropriate neurological exam are sufficient to allow a clinical diagnosis of brain death to be made. The period of observation needed may be reduced or terminated if clinical findings are supported by other tests. Although not necessary for the diagnosis of brain death when all aspects of clinical examination are completed, ancillary testing such as: electroencephalography in conjunction with somatosensory and brainstem auditory evoked potentials; radionuclide; contrast blood flow studies; brain metabolism studies (positron emission tomography or nuclear medicine imaging); or other clinically proven methods may provide additional support for the clinical diagnosis.

7. Certification of Brain Death

a. Whenever possible, a neurologist, neurosurgeon, or intensivist will certify that the criteria for brain death have been met by in-person evaluation or by synchronous tele-consultation if available.

b. If it is not possible for an attending physician to consult with a neurologist, neurosurgeon, or intensivist, the attending physician and one other physician may certify that the criteria for brain death have been met. In all cases involving certification of brain death by two physicians, neither of whom is a neurologist, neurosurgeon or intensivist, the attending physician will document why it was not possible to consult with a neurologist, neurosurgeon, or intensivist.

c. If it is not possible to have the certification of a neurologist, neurosurgeon, intensivist, or certification by two physicians, one physician may certify that the criteria for brain death have been met. In all cases involving certification of brain death by only one physician, that physician will document why it was not possible to have the certification of a neurologist, neurosurgeon, intensivist, or the certification of another physician.

d. The patient's family or next of kin will not participate in the clinical determination of brain death. However, reasonable efforts should be made to notify the patient's family or next of kin before performing the clinical determination. In the event the family requests to either forgo the examination or continue somatic support after declaration of brain death, the healthcare team should seek guidance and support from their local ethics and legal team.

e. Neither the attending nor consulting physicians will be related to the patient by blood or marriage, or have some other significant relationship that might be reasonably construed as creating a conflict of interest.

f. While it is understood that other members of the healthcare team may play important and critical roles in managing and caring for a dying patient, the final responsibility for interpreting all relevant clinical information and issuing the declaration of death rests with the physician as discussed in paragraphs 7a through 7c.

8. Action

a. Medical Corps Officers

(1) Brain death will be determined per the definition and criteria set forth in paragraphs 6 and 7. If ancillary procedures are deemed necessary by the attending physician or consulting physician, they should be performed and documented per currently established medical guidelines.

(2) Prior to declaring the patient dead, the attending physician will document in the patient's medical record the criteria used (as set forth in paragraph 6 of this instruction) to establish that brain death has occurred.

(3) Following declaration of death, the BUMED policy on organ donation, reference (c), will be consulted to determine if the deceased is an organ or tissue donor prior to discontinuing or terminating the ventilator and any other artificial means of life support in use.

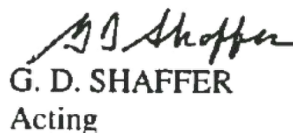
b. Commanders, Commanding Officers, and Officers in Charge. Will review existing command instructions establishing procedures for the determination of death and modify inconsistent provisions to make them consistent with this instruction.

9. Records Management

a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned per the records disposition schedules located on the Department of the Navy Directorate for Administration, Logistics, and Operations, Directives and Records Management Division portal page at https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx.

b. For questions concerning the management of records related to this instruction or the records disposition schedules, please contact the local records manager or the Department of the Navy Directorate for Administration, Logistics, and Operations, Directives and Records Management Division program office.

10. Review and Effective Date. Per OPNAVINST 5215.17A, Office of General Counsel (BUMED-M00L) will review this instruction annually around the anniversary of its issuance date to ensure applicability, currency, and consistency with Federal, Department of Defense, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 10 years, unless revised or cancelled in the interim, and will be reissued by the 10-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A, paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.



G. D. SHAFFER
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