New Guidance Issued on the Determination of Brain Death
*AAN, AAP, CNS and SCCM Develop Consensus Practice Guideline*

MINNEAPOLIS – New guidance has been issued for clinicians on the determination of brain death, also known as death by neurologic criteria. A new consensus practice guideline, developed through a collaboration between the American Academy of Neurology (AAN), the American Academy of Pediatrics (AAP), the Child Neurology Society (CNS), and the Society of Critical Care Medicine (SCCM) is published in the October 11, 2023, online issue of *Neurology*, the medical journal of the American Academy of Neurology.

This guideline updates the 2010 AAN adult practice guidelines and the 2011 AAP/CNS/SCCM pediatric practice guidelines on the determination of brain death. Because of a lack of high-quality evidence on the subject, the experts used an evidence-informed consensus process to develop the guideline.

“Until now, there have been two separate guidelines for determining brain death, one for adults and one for children,” said author Matthew P. Kirschen, MD, PhD, FAAN, of the Children’s Hospital of Philadelphia, and a member of the Child Neurology Society and the Society of Critical Care Medicine. “This update integrates guidance for adults and children into a single guideline, providing clinicians with a comprehensive and practical way to evaluate someone who has sustained a catastrophic brain injury to determine if they meet the criteria for brain death.”

Brain death is a state in which there is complete and permanent cessation of function of the brain in a person who has suffered catastrophic brain injury.

“Brain death means that clinicians cannot observe or elicit any clinical signs of brain function,” said author David M. Greer, MD, FAAN, FCCM, of Boston University in Massachusetts. “Brain death is different from comatose and vegetative states. People do not recover from brain death. Brain death is legal death.”

The consensus practice guideline outlines the standardized procedure for trained clinicians to evaluate people for brain death. As part of this procedure, clinicians perform an evaluation to determine whether there is any clinical functioning of the brain and brainstem, including whether the person breathes on their own. Brain death is declared if a person has a catastrophic brain injury, has no possibility of recovering any brain function, is completely unresponsive, does not demonstrate any brain or brainstem function, and does not breathe on their own.

This guideline includes updates on the prerequisites for brain death determination, the examination and the examiners, apnea testing and ancillary testing.

As part of the guideline, a digital application has been developed to walk clinicians through the process of brain death determination. It is available for free on AAN.com.

“Right now, brain death determination policies vary among hospitals across the U.S. and worldwide, and a standardized approach is necessary,” said author Ariane Lewis, MD, FAAN, of NYU Langone Medical Center in New York City. “This guideline provides a highly rigorous and structured approach to brain death evaluation and determination. It is recommended that hospital administrators ensure that their hospital’s brain death determination policies are updated to be consistent with this new guideline.”
“The American Academy of Pediatrics appreciates the development of this consensus guideline, which took many hours of careful and evidence-based consideration,” said author Sonia Partap, MD, FAAP, of Stanford University in California. “Any child’s death is never short of devastating. Pediatricians share a special relationship and trust with their patients and this guideline is to ensure we help families walk through the most difficult circumstances.”

“Guidelines should speak to the full community that will be applying them in practice,” said author Lori Shutter, MD, of the University of Pittsburgh in Pennsylvania, and a member of the Society of Critical Care Medicine. “The authorship of this guideline addresses that by including representatives from both academic and community settings and with a wide variety of specialties, including critical care, neurology and pediatrics. This document can guide care across the spectrum of clinical needs.”

The guideline was funded by the American Academy of Neurology.

About the American Academy of Neurology
The American Academy of Neurology is the world’s largest association of neurologists and neuroscience professionals, with over 40,000 members. The AAN is dedicated to promoting the highest quality patient-centered neurologic care. A neurologist is a doctor with specialized training in diagnosing, treating and managing disorders of the brain and nervous system such as Alzheimer’s disease, stroke, migraine, multiple sclerosis, concussion, Parkinson’s disease and epilepsy.

For more information about the American Academy of Neurology, visit AAN.com or find us on Facebook, Twitter, Instagram, LinkedIn and YouTube.

About the American Academy of Pediatrics
The American Academy of Pediatrics is an organization of 67,000 primary care pediatricians, pediatric medical subspecialists and pediatric surgical specialists whose mission is to attain optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults. For frequent updates on AAP recommendations, Pediatrics studies, AAP in the news, public awareness campaigns, information for parents and more, follow us on social media @AmerAcadPeds or go to AAP.org.

For parent-friendly health information from the AAP, visit www.HealthyChildren.org.

About the Child Neurology Society
The Child Neurology Society (CNS) is the professional home of physicians specializing in pediatric neurology from the U.S., Canada, and around the world. Founded in 1972 — just three years after the American Board of Psychiatry and Neurology awarded the first board certification in neurology with special qualifications in child neurology — the society’s mission is to connect pediatric neurologists and advance the field of child neurology through education, collaboration, and mentorship. With nearly 3,000 members worldwide, CNS stands on the belief that every member counts because every child counts. To learn more, visit childneurologysociety.org.

About the Society of Critical Care Medicine
The Society of Critical Care Medicine (SCCM) is the largest nonprofit medical organization dedicated to promoting excellence and consistency in the practice of critical care. With members in more than 80 countries, SCCM is the only organization that represents all professional components of the critical care team. SCCM’s Critical Care Congress brings together intensivists and critical care experts from around the world to share the latest scientific research, develop solutions to common issues, and improve the care of critically ill and injured patients. For more information on SCCM, visit sccm.org or follow SCCM on LinkedIn, Facebook, Twitter (X), and YouTube.