



UNDERSTANDING
ORGAN DONATION
TRANSPLANTS AND BRAIN DEATH
The Facts You Aren't Told

Joseph Varon, MD, FACP, FCCP, FCCM, FRSM

Professor, President and Chief Medical Officer, Independent Medical Alliance



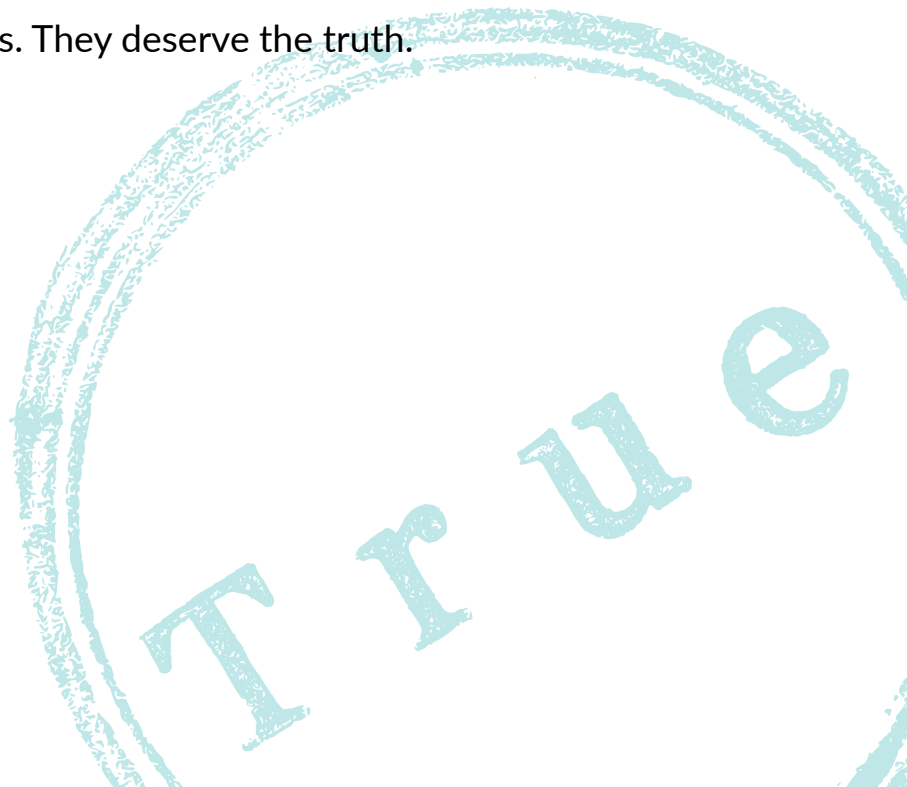
INTRODUCTION

Every year, thousands of Americans are added to organ transplant waiting lists, hoping for a second chance at life. For them, organ donation represents a miracle: the chance to receive a kidney, liver, heart, or lung that may restore their health and extend their lives. Campaigns promote donation as the ultimate act of generosity, often framed as a simple decision—check the box, save a life.

But beneath the inspiring narratives lies a complex, often uncomfortable reality. The very foundation of the transplant system—how we define death—is not as clear as the public assumes. Hospitals, government agencies, and advocacy groups present brain death as a settled matter. In truth, it remains a medical, ethical, and cultural debate.

This article will explain organ donation and transplants in plain language. More importantly, it will pull back the curtain on brain death—how it is tested, what it really means, and why it remains controversial.

Readers deserve more than slogans. They deserve the truth.



THE GIFT OF ORGAN DONATION

Organ donation can transform lives. A kidney transplant can free a patient from dialysis. A liver transplant can rescue someone from certain death. Heart and lung transplants extend lives that otherwise would end too soon.

There are two main types of donors:

- **Living donors:** A healthy person donates one kidney, part of their liver, or even bone marrow. This can be done safely, though it carries risks.
- **Deceased donors:** Patients declared dead—usually by brain death—can donate multiple organs. In one case, a single donor may help save up to eight lives and improve many more through tissue donation (skin, corneas, bone, tendons).

But donation is not common. Fewer than 1% of hospital deaths occur under conditions suitable for organ donation. To be usable, organs must be healthy and removed quickly while blood is still circulating.

This is why most transplants depend on “brain-dead” donors—patients declared dead while their hearts are still beating with the help of machines.

THE TRANSPLANT JOURNEY

When a patient needs a transplant, doctors refer them to a transplant center for evaluation. They undergo tests to measure urgency, compatibility, and overall health. If approved, they are placed on the national waiting list, run by the United Network for Organ Sharing (UNOS).

The list is not simply first-come, first-served. Allocation depends on factors such as:

- Blood type and tissue match
- Body size (a child's organs cannot always go into an adult)
- Severity of illness
- Waiting time
- Geography (organs cannot survive transport forever)

The process is life-saving, but it has been marred by mismanagement. A 2022 federal investigation revealed that UNOS had lost track of organs in transit, failed to act on system errors, and neglected safety protocols. Lives have been lost not only due to shortages, but due to bureaucratic failure.

If the system demands public trust in something as weighty as “brain death,” it must also earn trust by fixing these failures.

THE TRANSPLANT JOURNEY

How a life-saving organ moves and where the chain snaps



1 Referral

Patient is referred to a transplant center



2 Evaluation

Tests assess urgency & compatibility



3 UNOS Waiting List

Patient is listed in organ matching system



4 Match Alert

A match is found via allocation rules



5 Transplant OR

Patient goes to the operating room



INDEPENDENT™
MEDICAL ALLIANCE

ALLOCATION FACTORS

- ✓ Blood and Tissue
- ✓ Body Size
- ✓ Severity
- ✓ Wait Time
- ✓ Geography



70+ organs

lost in transit in 2022



15% of shipping coolers
lacked UPS tracking



Critical software bugs
ignored for 2 years



A System Demanding Trust Must Earn Trust

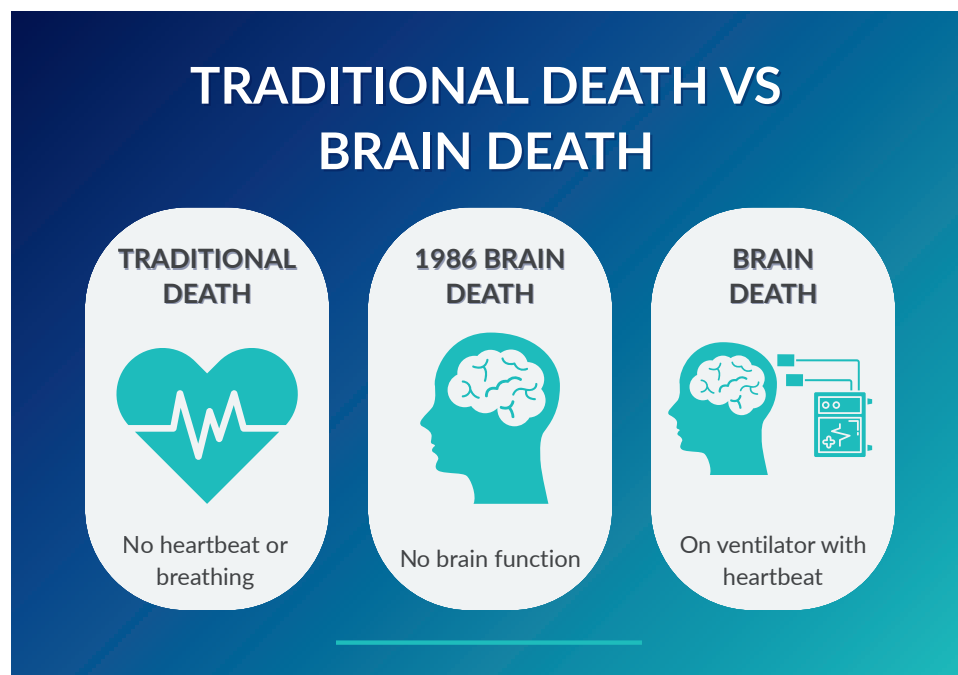
WHAT IS BRAIN DEATH?

The heart of the debate is here: what does it mean to be dead?

Traditionally, death was simple—no heartbeat, no breathing, no life. But when ventilators and life support machines became common in the 1950s and 1960s, patients with catastrophic brain injuries could be kept “alive” with a beating heart and circulating blood, even if their brains were irreversibly damaged.

In 1968, a Harvard committee introduced a new definition: **brain death**. This standard declared a person dead if their entire brain, including the brainstem, had permanently ceased to function—even if machines kept the heart beating.

Since then, brain death has been recognized in U.S. law as legal death. But the criteria and testing methods vary between states, hospitals, and countries. And the gap between what doctors see and what families perceive has fueled decades of confusion and mistrust.



HOW DOCTORS TEST FOR BRAIN DEATH

Declaring brain death is not done lightly. Physicians must perform a series of clinical examinations designed to prove the total absence of brain function. In most U.S. hospitals, two physicians independently confirm the findings.

Here are the key steps, explained in detail:

1. Establish the Cause of Brain Injury

Doctors must first confirm there is a known, irreversible cause (such as massive trauma, stroke, or lack of oxygen). Reversible causes must be ruled out: low body temperature, drug overdose, sedatives, or severe metabolic problems can mimic brain death but may be treatable.

2. Confirm Unresponsiveness

The patient is examined for any response to voice, touch, or pain. There should be no purposeful movement. Reflexive spinal movements (like twitching) may occur, but these come from the spinal cord, not the brain. Families often see these and believe they are signs of life.

3. Check Brainstem Reflexes

The brainstem controls basic survival functions like breathing, gagging, and pupil reaction. If the brainstem is truly gone, these reflexes will be absent:

- **Pupils:** Shine light in the eyes—no constriction means no brainstem function.
- **Corneal reflex:** Touch the eye gently—no blink response.
- **Oculocephalic reflex (“doll’s eyes”):** Move the head—normally the eyes move opposite the head. In brain death, the eyes stay fixed.
- **Caloric test:** Cold water is placed in the ear canal—normally triggers eye movement. In brain death, no response.
- **Gag and cough reflexes:** A suction tube in the throat or trachea should cause gagging or coughing. In brain death, nothing.

4. The Apnea Test

This is the cornerstone—and the most controversial test. Doctors remove the ventilator briefly while giving oxygen, to see if the patient tries to breathe on their own. Rising carbon dioxide levels in the blood should trigger breathing if the brainstem is working. If no breath occurs, it supports brain death.

But the apnea test is risky. It can cause the heart to become unstable, blood pressure to drop, and oxygen to plummet. Some argue it may harm patients who are not truly brain dead, pushing them closer to death.

5. Confirmatory Tests (Optional or Required in Some Cases)

Sometimes additional studies are used, especially if the exam cannot be completed:

EEG (electroencephalogram): Measures electrical activity in the brain. Brain death shows a flat line.

Cerebral blood flow studies (angiography, Doppler, nuclear scans): Show whether blood is reaching the brain. No flow = no function.

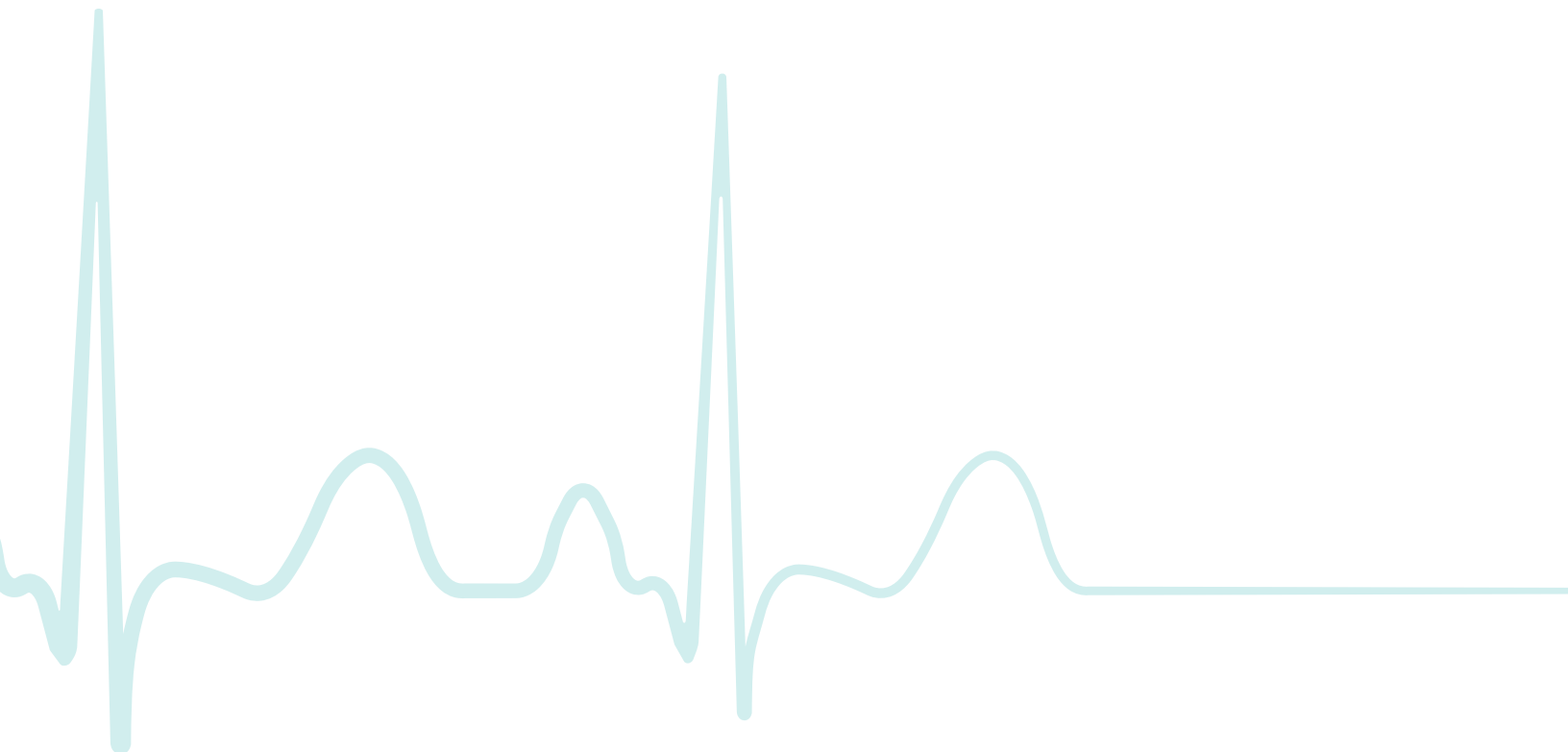
Evoked potentials: Measure brain response to sound or electrical signals. Absence of signals suggests no function.

Different hospitals use different combinations. In some countries, confirmatory tests are mandatory. In the U.S., they are often optional. This variation raises questions: how can death be “scientifically settled” if criteria differ by geography?

THE CONTROVERSIES AROUND TESTING

To the medical establishment, these tests are considered reliable. But several problems remain:

- **Variability:** Criteria differ between states and countries. A patient declared brain dead in one hospital might not be declared so in another.
- **Apnea test risks:** Critics argue it is not a neutral test, but an active procedure that can harm patients.
- **Residual activity:** Some “brain dead” patients have shown small blips of electrical activity or hormonal function.
- **Survival cases:** Rare but documented cases exist where patients diagnosed as brain dead-maintained circulation for days or weeks, even gestating pregnancies. This confuses families and undermines certainty.
- **Legal vs. medical death:** Brain death is legally death. But is it biologically identical to what most people understand as death? Many argue no.



MEDICAL AND ETHICAL QUESTIONS

This is where ethics collides with science.

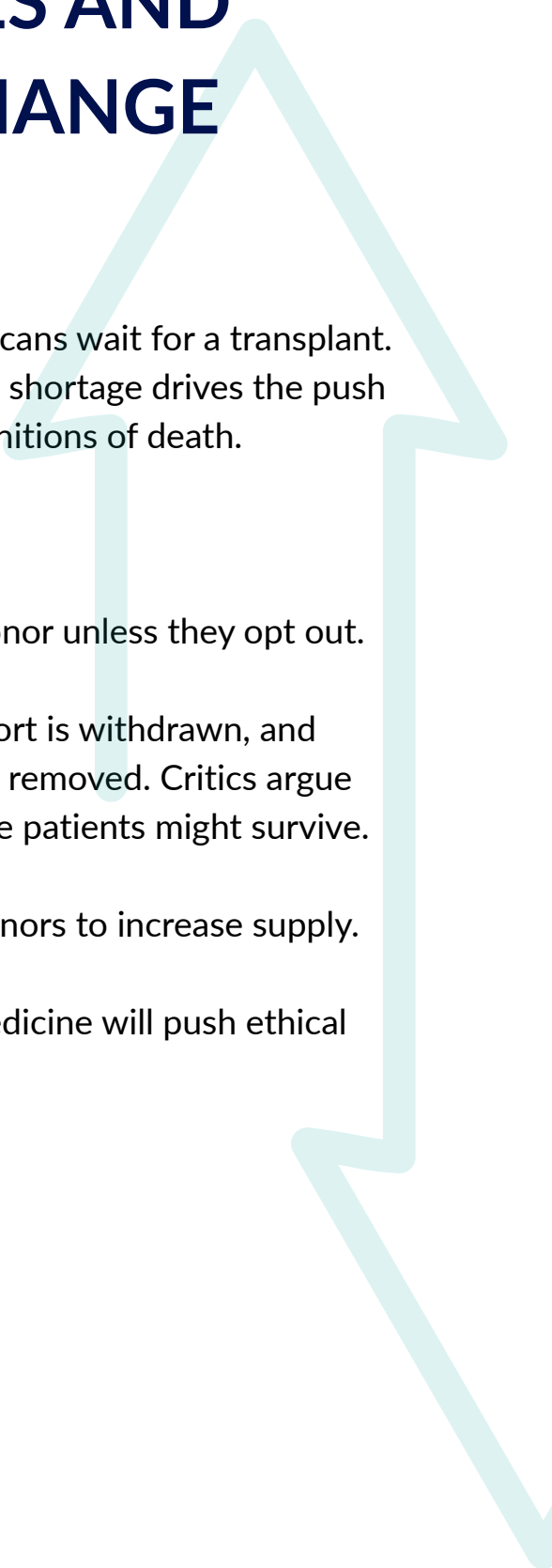
The “dead donor rule” is the cornerstone of transplantation: organs must be taken only from the dead. But if brain death is not universally accepted as true death, then the rule is shaky.

Families often report feeling pressured to consent to donation once brain death is declared. In their eyes, their loved one looks alive—warm, pink, heart beating. Doctors explain the tests, but the experience does not match the word “dead.”

Religious and cultural traditions differ widely. Some faiths require the heart to stop before death is recognized. Others accept brain death. This diversity is rarely acknowledged in donation campaigns.

The ethical issue is not whether organ donation saves lives—it does. The issue is whether society has quietly redefined death for the sake of organ supply without fully informing the public.

ORGAN SHORTAGES AND THE PUSH FOR CHANGE



The shortage of organs is severe. Over 100,000 Americans wait for a transplant. Thousands die each year before a match is found. This shortage drives the push to promote donation aggressively and to broaden definitions of death.

Proposals include:

- **Presumed consent:** Everyone is automatically a donor unless they opt out.
- **Donation after circulatory death (DCD):** Life support is withdrawn, and once the heart stops for a short period, organs are removed. Critics argue that if resuscitation were attempted, some of these patients might survive.
- **Expanded criteria donors:** Using older or sicker donors to increase supply.

The danger is that in the name of solving shortage, medicine will push ethical boundaries further.

STORIES OF HOPE AND DILEMMAS

There are true miracles in transplantation. Patients who return to normal life after receiving a heart or kidney inspire gratitude and hope. Families often find comfort in knowing their loved one “lives on” in others.

But we must also tell the stories that reveal cracks:

- Parents who fought hospitals trying to remove support after a brain death declaration.
- Families who later learned that not all doctors agree on brain death criteria.
- Cases where errors in testing were later discovered.

Ignoring these stories does not make them disappear. Honesty demands they be included in the narrative.

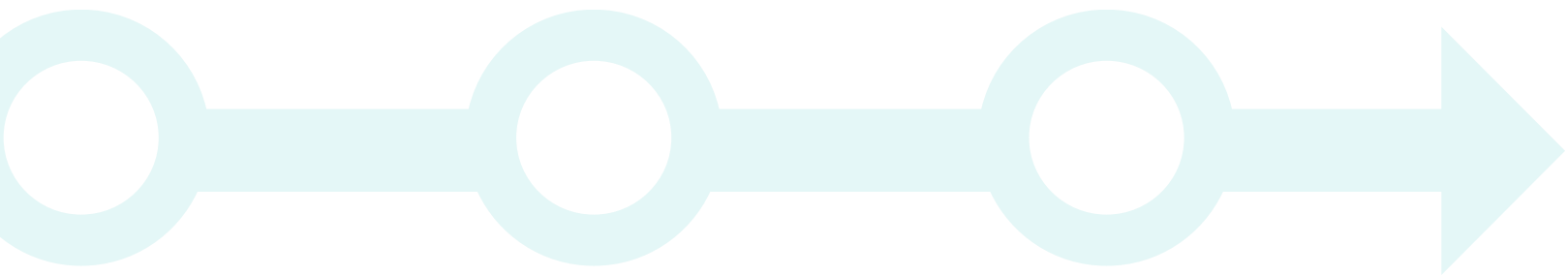


WHERE DO WE GO FROM HERE?

The solution is not to reject transplantation, but to reform it with honesty.

- **Transparency:** Families must be told exactly how brain death is diagnosed, what the tests mean, and what controversies exist.
- **Consent:** Consent should be informed, not rushed. Families must be given space to ask hard questions.
- **Oversight:** The transplant system must fix its well-documented failures. Every lost organ, every misstep, damages trust.
- **Innovation:** We must invest in alternatives—artificial organs, regenerative medicine, and technologies that reduce reliance on deceased donors.

Only then can organ donation rest on a foundation of trust instead of marketing slogans.



CONCLUSIONS

Organ donation saves lives. But it is built on a definition of death that remains contested. Brain death is not the same as cardiac death. It is a medical and legal construct created in the late 1960s, and it remains debated to this day.

If society chooses to accept brain death as death, that decision must be made openly, with full knowledge of the facts—not hidden behind comforting stories and one-sided campaigns.

The gift of life should be built on truth, not half-truths. Transparency will not weaken organ donation—it will strengthen it.

Only when families understand the whole picture can they make the most important choice of all with clear eyes.

THANKS TO YOU, THIS ORGAN DONATION GUIDE IS FREE

We're 100% donor-supported. Your gift enables us to do this critical research and create these life-saving, FREE resources.

IMA is a 501(c)(3) organization. Your gift is tax-deductible.



INDEPENDENT[™]
MEDICAL ALLIANCE

Visit IMAhealth.org
to donate, find more
resources, and
stay connected!

