

# What You Lose When You Sign That Donor Card

Updated April 4, 2012 12:55 p.m. ET

## Corrections & Amplifications

*The article below quotes Robert Truog, professor of medical ethics, anesthesia and pediatrics at Harvard Medical School, about the possible pain felt by an organ donor who has been declared brain dead. Mr. Teresi writes that Dr. Truog "compared the topic of pain in an organ donor to an argument over 'whether it is OK to kick a rock.' " A review of Mr. Teresi's notes after the publication of the essay reflects that Dr. Truog, when asked whether a donor feels pain, said "it's like kicking a rock." Dr. Truog, however, denies that he used the analogy. "I can tell you in the strongest possible terms that I am certain I never said anything like this." In a separate issue, recipients of single-organ transplants—heart, intestine, kidney, liver, single and double lung and pancreas—are charged an average \$470,000, ranging from \$288,000 for a kidney transplant to \$1.2 million for an intestine transplant, according to consulting firm Milliman. A previous version of this article incorrectly said that average recipients are charged \$750,000 for a transplant, and that at an average 3.3 organs, that is more than \$2 million per body.*

The last time I renewed my driver's license, the clerk at the DMV asked if she should check me off as an organ donor. I said no. She looked at me and asked again. I said, "No. Just check the box that says, 'I am a heartless, selfish bastard.'"

Becoming an organ donor seems like a win-win situation. Some 3.3 people on the transplant waiting list will have their lives extended by your gift (3.3 is the average yield of solid organs per donor). You're a hero, and at no real cost, apparently.

But what are you giving up when you check the donor box on your license? Your organs, of course—but much more. You're also giving up your right to informed consent. Doctors don't have to tell you or your relatives what they will do to your body during an organ harvest operation because you'll be dead, with no legal rights.

The most likely donors are victims of head trauma (from, say, a car or motorcycle accident), spontaneous bleeding in the head, or an aneurysm—patients who can be ruled dead based on brain-death criteria. But brain deaths are estimated to be just around 1% of the total. Everyone else dies from failure of the heart, circulation and breathing, which leads the organs to deteriorate quickly.

The current criteria on brain death were set by a Harvard Medical School committee in 1968, at a time when organ transplantation was making great strides. In 1981, the Uniform Determination of Death Act made brain death a legal form of death in all 50 states.

The exam for brain death is simple. A doctor splashes ice water in your ears (to look for shivering in the eyes), pokes your eyes with a cotton swab and checks for any gag reflex, among other rudimentary tests. It takes less time than a standard eye exam. Finally, in what's called the apnea test, the ventilator is disconnected to see if you can breathe unassisted. If not, you are brain dead. (Some or all of the above tests are repeated hours later for confirmation.)

Here's the weird part. If you fail the apnea test, your respirator is reconnected. You will begin to breathe again, your heart pumping blood, keeping the organs fresh. Doctors like to say that, at this point, the "person" has departed the body. You will now be called a BHC, or beating-heart cadaver.

Still, you will have more in common biologically with a living person than with a person whose heart has

stopped. Your vital organs will function, you'll maintain your body temperature, and your wounds will continue to heal. You can still get bedsores, have heart attacks and get fever from infections.

"I like my dead people cold, stiff, gray and not breathing," says Dr. Michael A. DeVita of the University of Pittsburgh Medical Center. "The brain dead are warm, pink and breathing."

You might also be emitting brainwaves. Most people are surprised to learn that many people who are declared brain dead are never actually tested for higher-brain activity. The 1968 Harvard committee recommended that doctors use electroencephalography (EEG) to make sure the patient has flat brain waves. Today's tests concentrate on the stalk-like brain stem, in charge of basics such as breathing, sleeping and waking. The EEG would alert doctors if the cortex, the thinking part of your brain, is still active.

But various researchers decided that this test was unnecessary, so it was eliminated from the mandatory criteria in 1971. They reasoned that, if the brain stem is dead, the higher centers of the brain are also probably dead.

But in at least two studies before the 1981 Uniform Determination of Death Act, some "brain-dead" patients were found to be emitting brain waves. One, from the National Institute of Neurological Disorders and Stroke in the 1970s, found that out of 503 patients who met the usual criteria of brain death, 17 showed activity in an EEG.

Even some of the sharpest critics of the brain-death criteria argue that there is no possibility that donors will be in pain during the harvesting of their organs. One, Robert Truog, professor of medical ethics, anesthesia and pediatrics at Harvard Medical School, compared the topic of pain in an organ donor to an argument over "whether it is OK to kick a rock."

But BHCs—who don't receive anesthetics during an organ harvest operation—react to the scalpel like inadequately anesthetized live patients, exhibiting high blood pressure and sometimes soaring heart rates. Doctors say these are simply reflexes.

What if there is sound evidence that you are alive after being declared brain dead? In a 1999 article in the peer-reviewed journal *Anesthesiology*, Gail A. Van Norman, a professor of anesthesiology at the University of Washington, reported a case in which a 30-year-old patient with severe head trauma began breathing spontaneously after being declared brain dead. The physicians said that, because there was no chance of recovery, he could still be considered dead. The harvest proceeded over the objections of the anesthesiologist, who saw the donor move, and then react to the scalpel with hypertension.

Organ transplantation—from procurement of organs to transplant to the first year of postoperative care—is a \$20 billion per year business. Recipients of single-organ transplants—heart, intestine, kidney, liver, single and double lung and pancreas—are charged an average \$470,000, ranging from \$288,000 for a kidney transplant to \$1.2 million for an intestine transplant, according to consulting firm Milliman. Neither donors nor their families can be paid for organs.

It is possible that not being a donor on your license can give you more bargaining power. If you leave instructions with your next of kin, they can perhaps negotiate a better deal. Instead of just the usual icewater-in-the-ears, why not ask for a blood-flow study to make sure your cortex is truly out of commission?

And how about some anesthetic? Although he doesn't believe the brain dead feel pain, Dr. Truog has used two light anesthetics, high-dose fentanyl and sufentanil, which won't harm organs, to quell high blood pressure or heart rate during harvesting operations. "If it were my family," he said, "I'd request them."

—Mr. Teresi is the author of "The Undead: Organ Harvesting, the Ice-Water Test, Beating-Heart Cadavers—How Medicine Is Blurring the Line Between Life and Death."