The death of 21-year-old Elijah Smith at Grant Medical Center this month and his family’s dispute with Lifeline of Ohio over his organ donation has brought to the forefront questions about what constitutes death.

Most doctors agree that a person has died when the brain ceases to perform its most essential functions, even if machines and medications keep the heart beating and the lungs delivering oxygen.

Doctors have a list of tests that they perform before declaring death. It’s a process that generally takes several hours. They look for signs of life in a variety of ways, including pouring ice water in the ear, pinching the body, shining light into the pupils and checking for a gag reflex.

They make sure there’s no other explanation, such as a low body temperature, low blood pressure, drugs or poisoning.

In the final step, an apnea test, they turn off the ventilator to see if the person takes a breath, and they take blood to confirm it is acidic and high in carbon dioxide.

If there are no signs of activity in the brain stem, the doctor prepares to share one of the most difficult things a family can hear.

To Pam Smith, Elijah’s mother, death occurs when all of the organs cease to work. She said that seeing that would have given her peace of mind that there was no hope for Elijah, a new father who was hit by a car while riding his bicycle on July 3. He was declared brain dead the next day.

It’s not that she didn’t trust the doctors who ran the tests. They were thorough and explained everything clearly, she said.

“We wanted for him to be unplugged, to see him die completely, so that we could accept that we did everything we could,” Mrs. Smith said. “We were still hoping against hope that he would breathe. We knew that wasn’t very likely.”

When the Smiths learned that their son signed up to be an organ donor and that meant he’d stay on support until the transplant surgery, they fought unsuccessfully against donation.

On July 7, Mrs. Smith, of the East Side, wrote to Grant and to Lifeline to say that the family did not consent to have Elijah’s organs removed because Elijah did not fully understand the choice he had made.

Grant officials deferred to the family and told Lifeline that a court order would be needed to proceed with the organ removal. On July 10, Lifeline filed a complaint in Franklin County Probate Court seeking the right to proceed. The next day, a judge signed a court order.

In medicine, there is widespread agreement that the tests for brain death are sound and that the absence of brain activity equals death. Ohio law, like that in other states, recognizes it. It’s also well-understood that organs supplied with oxygen-rich blood stand the best chance of saving another life.
But for those facing the shock of losing someone suddenly, this can be unfamiliar, confusing and upsetting territory.

“Theyir loved one can look very much alive, because we’ve been keeping them that way,” said Dr. Diana Greene-Chandos, director of neurosciences critical care for education, quality and outreach at Ohio State University’s Wexner Medical Center.

There are some who call the line between life and death blurry, and some religious groups don’t believe in brain death. And there are the occasional stories about someone whose family believed was brain dead who survived.

But overall, there’s little debate about death in someone whose brain shows no signs of life, said J. Javier Provencio, a neurointensivist at the Cleveland Clinic. “In patients who are declared dead by accepted medical standards, nobody has come back,” he said.

Provencio, like Greene-Chandos, prefers the term death by neurological criteria to brain death.

Dr. Marco Bonta, medical director of trauma services at Riverside Methodist Hospital, said declaring someone brain dead is something that doctors are serious and methodical about. At OhioHealth hospitals, the declaration always requires a second opinion, he said.

Brain death is not the same as a coma, in which some patients get better. That’s something some families have a hard time grasping, Provencio said.

“It oftentimes takes a while and multiple conversations,” he said. “This is the worst day of some people’s lives.”

For some family members, being in the room during the neurological tests can be helpful, but most are comfortable with the doctor’s assessment and explanation, Greene-Chandos said.

Doctors who determine brain death typically have no knowledge of whether a person is an organ donor, and it should have no bearing on the timing of declaring death, experts say.

“Our hearts and our oath and our whole reason for being physicians says if we could do anything to save them, we would,” Greene-Chandos said.

Fewer than 1 percent of deaths are brain deaths, and the majority of donated organs come from those people, said Dorrie Dils, Lifeline of Ohio’s chief clinical executive.

Donors’ bodies are kept on support for an average of 24 hours until the organs can be removed for transplant.

Lifeline of Ohio has heard from people who had questions about the Smith case and from some who wanted to know how to remove themselves from the organ-donor registry, said spokeswoman Marilyn Pongonis. Some were upset about the organization’s decision to take legal action.

From July 12 (when the Dispatch story about the issue appeared) to July 17, 281 new donors signed up and 154 people asked to be removed from the registry, according to Lifeline, which gets data from the state Bureau of Motor Vehicles.

In the comparable six-day period a week earlier, 280 people signed up and 125 asked to be removed.

As of June 30, Ohio had nearly 5.3 million registered donors.

Mrs. Smith said she wants people to better understand what organ donation entails and to discuss it with family members.

“It’s not that we’re against organ donation. We just don’t like the way it’s done.”

mcrane@dispatch.com

@MistiCrane