

Medical Advances and Breakthroughs

Courtesy: Good HouseKeeping Magazine By Beth Howard

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Code Cool

When a person's heart stops beating, no blood — and no oxygen — is going to the brain. Cooling the body a few degrees reduces the chance of damage, increasing the odds that the patient will return to a normal life. That's why accident victims who live through a plunge into a freezing river can survive without neurological problems. But in a hospital, the processes that are used to cool bodies — blowing cold air on patients, or packing them in ice — can take hours, often too long to stop cell death and brain damage. It's no wonder only a small fraction of cardiac arrest patients whose hearts are restarted regain all their abilities.

"If the stars hadn't fallen in line on November 11, 2008," as Cynthia Crawford, 57, puts it, she might not have been in that lucky group. A former psychiatric nurse in Baton Rouge, LA, and a mother of four, Crawford was at New Orleans's Ochsner Medical Center for tests to see if she was a candidate for a heart transplant. A former smoker who suffered from congestive heart failure, Crawford was using a pacemaker and an implanted defibrillator to keep her heart pumping. But it was growing weak. When a medical resident found her slumped in the hospital garage, he quickly rushed her to the ER. You could call it being in the right place at the right time. Ochsner is one of only about 50 medical facilities that use a novel cooling therapy called the [ThermoSuit](#). This inflatable cocoon-like device sprays the body with hundreds of icy-cold jets of water, reducing a patient's temperature in about 20 to 40 minutes. "It's faster than anything previously available," says Paul McMullan Jr., M.D., an interventional cardiologist at Ochsner; that has translated into far lower rates of brain damage in patients at centers using the device. Crawford doesn't remember much about the day her heart stopped. But when she woke up in the intensive care unit, she says, "I knew I'd been to hell and back. I learned that they'd had to shock me five times to get my heart going again." After cooling her body, doctors implanted a heart pump to take over the work of her weakened heart, buying time while she waits for a new one from a donor. But she wouldn't even be on the transplant list if she hadn't been lucky enough to be placed in a [ThermoSuit](#). "A

nurse on the cardiac unit told me that somebody who comes in like I did usually ends up in a long-term-care facility," says Crawford. Instead, she has "more energy than ever." And while the battery for the pump, carried in a vest, is a "little cumbersome," says Crawford, it hasn't slowed her down. "I go everywhere — especially if it involves shopping.